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SEPTEMBER, 1897.

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THE BUREAU OF FOREIGN COMMERCE.

From and after July 1, 1897, the Bureau of Statistics, Department of State, will be known as the Bureau of Foreign Commerce, in accordance with the following order of the Secretary of State:

DEPARTMENT OF STATE,
Washington, July 1, 1897.

Under the authority conferred upon me by chapter 268, United States Statutes at Large, Fifty-fourth Congress, second session, under the heading "Publication of Diplomatic, Consular, and other commercial reports," the name of the Bureau of Statistics of this Department is hereby changed to the Bureau of Foreign Commerce, and the title of the Chief of the Bureau of Statistics shall hereafter be Chief of the Bureau of Foreign Commerce.

JOHN SHERMAN,
Secretary of State.

The reasons for the change are set forth in the following report from the Chief of the Bureau of Statistics to the Secretary of State:

DEPARTMENT OF STATE,
Washington, June 30, 1897.

Honorable JOHN SHERMAN,
Secretary of State.

SIR: I have the honor to call your attention to the clause in the diplomatic and consular appropriation bill for the fiscal year ending June 30, 1898, approved February 20, 1897, which provides for the publication of diplomatic, consular, and other commercial reports. (See page 590, United States Statutes at Large, Fifty-fourth Congress, second session.) The paragraph reads as follows:

Preparation, printing, publication, and distribution, by the Department of State, of the diplomatic, consular, and other commercial reports, twenty-five thousand dollars; and of this sum the Secretary of State is authorized to use not exceeding three thousand one hundred and twenty dollars for services of employees in the Bureau of Statistics, Department of State, in the work of compiling and distributing such reports, and not exceeding two hundred and fifty dollars in the purchase of such books, maps, and periodicals as may be necessary to the editing of diplomatic, consular, and other commercial reports: Provided, That all terms of measure, weight, and money shall be reduced to, and expressed in, terms of the measure, weight, and coin of the United States, as well as in the foreign terms; that each issue of consular reports shall not exceed seven thousand copies: And provided further, That the Secretary of State be, and he is hereby, authorized to change the

name of the Bureau of Statistics to the Bureau of Foreign Commerce, and that the foregoing provision shall apply with the same force and effect to the Bureau of Foreign Commerce as to the Bureau of Statistics.

You will perceive that the Secretary of State is authorized by the foregoing to change the name of the Bureau of Statistics of this Department to the Bureau of Foreign Commerce, and that the provision for the maintenance of the Bureau of Statistics is made to apply with the same force and effect to the Bureau of Foreign Commerce. As the appropriation becomes available on the 1st of July, I respectfully ask authority from you to carry the legislation specified into effect. The reasons for making the change, as stated to Congress and approved by that body, are:

(1) The confusion arising from the fact that there are three bureaus of statistics in the Executive Departments, viz:

Bureau of Statistics, Department of State;

Bureau of Statistics, Treasury Department;

Division of Statistics, Department of Agriculture.

Shortly after taking charge of this Bureau, I became impressed with the fact that the general public was unable to discriminate between the various bureaus of the same name, and that unnecessary labor and delay resulted.

(2) The name Bureau of Statistics does not properly denote the functions of this Bureau, which is exclusively commercial in its character, its work being that of collecting, compiling, and distributing the commercial reports of our diplomatic and consular officers. There is a wide range of statistics with which the Bureau has nothing to do, and its designation as a Bureau of Statistics is, therefore, misleading. The use of the words Bureau of Foreign Commerce, on the other hand, besides correctly indicating the character of the work, is likely, in my judgment, to impress upon the public mind the importance of the commercial functions of this Department.

In view of these considerations, I submit the draft of an order for your signature.

Respectfully yours,

FREDERIC EMORY,
Chief, Bureau of Statistics.

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Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to April 1, 1897, have been prepared to assist in computing the proper values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz, (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*.	Gold and silver..	Peso.....	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc.....	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil.....	Gold	Milreis.....	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	.....do.....	Dollar.....	1.00	
Chile.....	.....do.....	Peso.....	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica.....	.....do.....	Colon..	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	.....do	.92,6	Gold—doubloon ($5.01,7); silver—peso.
Denmark	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Egypt.....	.....do.....	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	.....do.....	Mark.....	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark.....	.23,8	Gold—5, 10, and 20 marks.
Great Britain.....	.....do.....	Pound sterling...	4.85,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver..	Drachma.....	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	.....do.....	Gourde.....	.96,5	Silver—gourde.
Italy.....	.....do.....	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Japan‡.....	Gold	Yen.....	.99,7	Gold—1, 2, 5, 10, and 20 yen.
Liberia	.....do.....	Dollar.....	1.00	
Netherlands§.....	Gold and silver..	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar.....	*1.01,4	Gold—$2 ($2.02,7).
Portugal.....	.....do.....	Milreis.....	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖.....	.....do.....	Ruble.....	.77,2	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain.....	Gold and silver..	Peseta.....	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster.....	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela.....	Gold and silver..	Bolivar.....	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875, the gold standard prevailed in the Argentine Republic.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ended July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

‡ For particulars as to the change from silver to the gold standard, see CONSULAR REPORTS No. 201, p. 259.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

‖ **Russia**: Gold the nominal standard; silver the actual standard.—*Note by the United States Treasury.* See, also, review of Russian industries and commerce by the Russian Minister of Finance ni "Review of the world's commerce," Commercial Relations of the United States for 1895-96, p. 230.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6	.....	.....
China	Silver	Haikwan tael	1.61	1.61	.....	.....	.....	.....
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	.....	.....
	Silver		.....	.....	.....	.....	.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso	.....	.....	.....	.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	.....	.....	.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

* The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

† The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1894.				1895.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.51,6	$0.46,5	$0.45,7	$0.46,4	$0.45,5	$0.44,1	$0.48,6	$0.48,6
Central America.*	Silver peso	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
China†	Shanghai tael	.76,2	.68,6	.67,6	.68,5	.67,3	.65,2	.71,8	.71,8
	Haikwan tael	.84,9	.76,5	.75,3	.76,3	.74,9	.75,6	.80	.80
	Tientsin tael				.72,7	.71,4	.69,2	.76,1	.76,2
	Chefoo tael				.71,7	.70,4	.68,3	.75,1	.75,2
Colombia	Silver peso	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
Ecuador	do	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
India	Silver rupee	.24,5	.22,1	.21,7	.22	.21,6	.21	.23,1	.23,1
Japan‡	Silver yen	.55,6	.50,1	.49,3	.50	.49,1	.47,6	.52,4	.52,4
Mexico	Silver dollar	.56	.50,5	.49,7	.50,4	.49,5	.47,9	.52,8	.52,8
Persia	Silver kran							.08,9	.09
Peru	Silver sol	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
Russia§	Silver ruble	.41,3	.37,2	.36,6	.37,1	.36,4	.35,3	.38,9	.38,9
Tripoli	Silver mahbub	.46,5	.41,9	.41,3	.41,8	.41,1	.39,8	.43,8	.43,8

Countries.	Monetary unit.	1896.				1897.		
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.
Bolivia	Silver boliviano.	$0.49,1	$0.49,3	$0.49,7	$0.49	$0.47,4	$0.46,8	$0.44,3
Central America*	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,5	.44,3
China†	Amoy tael				.79,3	.76,7	.75,7	.71,7
	Canton tael				.79	.76,5	.75,5	.71,5
	Chefoo tael	.75,9	.76,3	.76,9	.75,8	.73,3	.72,4	.68,6
	Chinkiang tael				.77,4	.74,9	.73,9	.70
	Fuchau tael				.73,3	.70,9	.70	.66,3
	Haikwan tael	.80,8	.81,2	.81,9	.80,6	.78	.77	.73,1
	Hankow tael				.74,2	.71,7	.70,8	.67,1
	Ningpo tael				.76,2	.73,7	.72,8	.68,9
	Niuchwang tael				.74,3	.71,9	.71	.67,2
	Shanghai tael	.72,5	.72,9	.73,5	.72,4	.70	.69,1	.65,5
	Swatow tael				.73,2	.70,8	.69,9	.66,2
	Takao tael				.79,8	.77,2	.76,2	.72,2
	Tientsin tael	.76,9	.77,3	.78	.76,8	.74,3	.73,4	.69,5
Colombia	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3
Ecuador	do	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3
India	Silver rupee	.23,3	.23,4	.23,6	.23,3	.22,5	.22,2	.21,1
Japan‡	Silver yen	.52,9	.53,2	.53,2	.52,8	.51,1	.50,5	
Mexico	Silver dollar	.53,3	.53,6	.54	.53,2	.51,5	.50,8	.48,2
Persia	Silver kran	.09	.09,1	.09,2	.09	.08,7	.08,6	.08,2
Peru	Silver sol	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3
Russia§	Silver ruble	.39,3	.39,5	.39,8	.39,2	.37,9	.37,4	
Tripoli	Silver mahbub	.44,3	.44,5	.44,9	.44,2			

*Costa Rica and British Honduras have the gold standard (see table showing countries with fixed currencies).

†China (silver). The haikwan tael is the customs tael. The "British dollar" has the same legal value as the Mexican dollar in Hongkong, the Straits Settlements, and Labuan.

‡Japan has adopted the gold standard (see CONSULAR REPORTS No. 201, p. 259).

§The Treasury Department, in its estimates of foreign values for the quarter ended July 1, 1897, gives Russia the gold standard, and in a footnote says: "Gold is the nominal standard, silver practically the standard." To appreciate the complicated state of Russian currency, see CONSULAR REPORTS No. 188, pp. 34-40, and Special Consular Reports, Money and Prices in Foreign Countries, part 2, pp. 381-400.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Dun	Japan	1 inch.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	4 yards.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Kota	Japan	5.13 bushels.
Korree	Russia	3.5 bushels.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	11⅓ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅝ acres.
Marc	Bolivia	0.507 pound.
Maund	India	82⅔ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	3.6 feet.
Seer	India	1 pound 13 ounces.
Shaku	Japan	10 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.
Vara	Argentine Republic	34.1208 inches.
Do	Castile	0.914117 yard.
Do	Central America	38.874 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100 000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

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PAPER TRADE IN FOREIGN COUNTRIES.

At the request of paper manufacturers of Massachusetts, the Department of State transmitted a circular, dated January 6, 1897, to the consular officers of the United States in Australasia and Central and South America directing them to make the necessary investigations into the paper trade in their respective districts and report the results of such investigations at their earliest convenience. The particular points to be covered by their investigations and reports were the following:

(1) The kinds of fine writing paper in use in your respective districts (ledger, bonds, linen laid and wove, fine, superfine, extra superfine—all flat, not folded).
(2) Average price of each kind per pound.
(3) Terms of sale.
(4) Terms of payment.
(5) Principal firms handling paper.
(6) Manner of packing and size and weight of packages which give the most satisfaction, and whether any improvements in packing can be suggested.
(7) Approximate quantity of papers used.

The following reports have been received in answer to the foregoing circular.

AUSTRALASIA.

NEW SOUTH WALES.

The colony of New South Wales has an educated and reading population of about 1,225,000. In the Australasian colonies, there are eight hundred newspapers published, besides a considerable yearly output of books, magazines, and miscellaneous periodicals.

Sydney is an important distributing point for much of continental Australia.

Imports.—The following table was prepared by the Government statistician of New South Wales:*

Value of imports of paper, books, etc., into New South Wales for the year ended December 31, 1896.

Whence imported.	Bags.		Brown and wrapping.	Circulars and advertising matter.	Printing and news paper.	Waste.	Writing, note, envelopes, and fancy.	Books and periodicals.
	Plain.	Printed.						
Australasia:								
Victoria	$2,681	$282	$4,306	$14,486	$13,902	$53	$19,493	$134,768
Queensland	97	.....	380	262	73	.....	102	6,673
South Australia	6,313	.....	2,828	1,973	3,856	.....	1,448	11,494
Western Australia	.....	.....	15	.....	.....	.....	.....	19
Tasmania	.....	.....	19	83	.....	.....	34	1,978
New Zealand	.....	.....	.....	816	83	.....	49	8,923
United Kingdom	28,353	1,784	98,262	64,701	322,609	316	144,313	466,244
Canada	.....	.....	204	1,205	20,869	.....	146	345
Hongkong	.....	.....	.....	.....	.....	.....	.....	15
India	.....	.....	.....	.....	.....	.....	.....	107
Ceylon	.....	.....	.....	.....	.....	.....	.....	97
Cape Colony	.....	.....	.....	589	.....	.....	.....	.....
Belgium	.....	.....	5,667	24	2,148	.....	569	112
China	.....	.....	.....	1,458	.....	.....	68	.....
France	.....	.....	2,863	467	.....	.....	.....	6,206
Germany	68	.....	33,111	2,756	36,480	.....	914	6,444
Italy	.....	.....	.....	.....	53	.....	413	.....
Japan	.....	.....	.....	87	3,669	.....	.....	102
Netherlands	.....	.....	.....	.....	365	.....	.....	.....
Philippine Islands	.....	.....	.....	209	.....	.....	.....	.....
Sweden	.....	.....	.....	.....	437	.....	.....	.....
United States	26,988	.....	4,130	6,600	164,172	.....	1,225	32,742
Total	64,500	2,066	151,785	95,716	568,716	369	168,774	676,269

The proportion of fine writing paper, such as ledger, bonds, linen laid and wove, fine, superfine, etc., unfolded, to the whole consumption is probably less than in the United States, but is large, considering population. The varieties, as given by the most extensive wholesale dealers in Sydney, are fine and superfine, cream laid and wove, blue laid and blue wove, azure and yellow laid and wove, and azure laid account bank paper, in reams of 480 sheets, flat, not folded. A well-informed gentleman from New York, who has been in the Australasian trade eight years, tells me these are usually of the cheaper grades.

Prices.—The prices, free on board at London, are: Ledger, 10 to 15 cents per pound; bonds, 12 cents; and tub-sized writing, 4 to 5 cents.

* The figures in the table were reduced from pounds sterling to dollars in the Bureau of Foreign Commerce, Department of State.

Terms.—Terms of sale, free on board at London or other port, and terms of payment, draft at sixty or ninety days' on Australia, though leading houses here make payment suited to demands of seller.

Dealers.—The principal dealers in Sydney are Alex. Cowan & Sons, Edwards, Dunlop & Co., John Sands, James Spicer & Sons, Gordon & Gotch, and Sands & McDougal.

Packing.—Greater care in packing is necessary on the part of American exporters. A leading Sydney dealer, in a note to me, says:

> All the papers, unless otherwise ordered, are packed in sheets of 480 to the ream, in good, strong wrappers, tied with tape, the wrapper covering the ends. All British papers are excellently packed, and this goes a long way to help the sale, as these papers receive a lot of handling before being used. The cases or bales (former preferred) should not weigh more than 4 or 4½ cwts.*. A great fault with American printing papers we have seen and handled is the flimsy wrappers, just kept together with wax, the consequence being that when the reams are lifted out of the case the wrappers fall to pieces.

Another large dealer tells me the consumers prefer paper packed in cases.

American trade.—Mr. Parsons, an American manufacturer who has done business in Sydney for eight years, says:

> The sizes used in Australia are all different to those used in the United States, and in sending samples out it is very desirable to have sheets cut to the size and weights of paper used here. The large buyers in Australia generally have their branch or parent house in London, so are very hard to start business with; but once started, it continues so long as they are protected against the fluctuations of the market.

Already some of our best paper manufacturers, including the Everett Pulp and Paper Company, Washington, and W. H. Parsons & Co., New York, are well represented in Sydney, Melbourne, and in the cities of New Zealand.

With several dealers, there is a prejudice in favor of Scottish paper, but the merits, backed by excellent business tact of the agents of the two firms above mentioned, have placed their papers in the front rank in Australia.

Sydney is a strong competitive point, and I want to impress American exporters with the importance of the question of packing goods, not only paper, but other classes of merchandise.

Sydney is a free port, so there is no duty on paper.

GEO. W. BELL,
Consul.

SYDNEY, *May 6, 1897.*

* 448 to 500 pounds.

NEW ZEALAND.

Kinds and prices.—The kinds of fine writing paper generally used in New Zealand and the average wholesale price per pound are as follows:

Large post, 21 by 16½ inches, cream laid and wove: Engine sized, 4d. (8 cents); fine tub sized, 7d. (14 cents); superfine tub sized, 8d. (16 cents); extra superfine sized, 9d. to 10d. (18 to 20 cents); imitation handmade or linen, 9d. (18 cents).

The weight per ream is about 18 pounds.

Double foolscap, 26½ by 16¾ inches (sometimes 27 by 17 inches). The latter is the American size, which is most used here. The average weight of this quality runs about 28 pounds to the ream.

Bank papers (cream and azure mostly used): Large post, 11 pounds; double cap, 14 pounds, 9d. to 10d. (18 to 20 cents).

Ledger papers: Engine sized, cheap, azure laid, say, 4d. (8 cents) per pound; tub sized, cheap, azure laid, 9d. (18 cents). The engine sized, in sizes, as double cap and demy, 24 to 30 pounds; the tub size, in sizes, as demy, 24 pounds; medium, 34 pounds; and royal, 44 pounds per ream.

All writing papers are imported flat and usually contain 480 sheets to the ream. It must be understood that wholesale prices have to bear freight, plus importers' profit. Linen and azure papers, worth, say, 6d. (12 cents), should have nice ream wrapper, specifying contents, and with pleasing design to give it an attractive appearance. In every instance where these details are present it materially assists the salesman.

All the paper used in this country is imported from England and the United States, but the greater proportion comes from the former country.

Terms.—Ninety days' sight, frequently cash in London, one month. If possible, payment should be taken in London, as the exchange between New Zealand and New York is almost prohibitive, being from 4 to 4½ per cent.

Dealers.—The principal firms handling papers in wholesale quantities are: Collins Bros., Auckland and Christ Church; Whitcomb & Tombs, Limited, Wellington and Christ Church; Ferguson & Mitchell, Dunedin.

Packing.—Cases lined with oilcloth, with average measurement—say 10 cubic feet to the case—are regarded as being the most convenient, profitable, and popular.

Paper of sizes smaller than that known as demy is subject to a duty of 20 per cent ad valorem, hence foolscap size is always imported in the double size.

JNO. D. CONNOLLY,
AUCKLAND, *May 8, 1897.* *Consul.*

TASMANIA.

I append copy of a letter from Messrs. J. Walch & Sons, of Hobart, the largest importers of paper here, dated May 7, 1897. I am unable to add to the information contained therein beyond observing that the total population of Tasmania is about 166,000.

J. WALCH & SONS TO CONSUL WEBSTER.

At your request, we annex hereto a memorandum of the London prices for writing papers. The qualities range from lowest engine sized to extra superfine. Most of the papers imported into this colony are bought in London to direct order of dealers here. We are not aware that any papers are sent on consignment to Tasmania. The prices we quote are those of wholesale houses in London and are subject on importation to customs duty of 5 per cent or 20 per cent ad valorem, according to the style or character of the papers. The import charges (packages, freight, insurance, etc.) amount to, say, 15 per cent or 25 per cent on the London prices. Papers are usually bought in London for cash, when a discount of 2½ to 5 per cent is allowed. If credit is required, the prices are net, and London houses draw at sixty days' sight through a bank, to whom the shipping documents are sent for delivery when the draft is paid. We can not recommend any papers to be sent from America on consignment to this colony, as, under the circumstances we have named, it is not probable that a market would be found. The population of Tasmania is small and the demand for papers very limited.

Prices.—Handmade papers for account books, all the usual sizes and weights, flat, 1s. to 1s. 6d. (24.3 to 36.4 cents) per pound; same, machine made, 3d. to 9d. (6 to 18 cents) per pound; cream wove and cream laid writing paper, all the usual sizes and weights, 2½d. to 8d. (5 to 16 cents) per pound. The same papers, ruled, cut quarto and octavo and parceled in 5 quires and half-ream packets, about 1s. to 1s. 6d. per ream in advance of prices for flat papers.

A. G. WEBSTER,
HOBART, *May 12, 1897.* *Consul.*

VICTORIA.

Kinds and prices.—All papers used here are flat, not folded, with 480 sheets to the ream, unless otherwise ordered. The following are the kinds in general use: Cream laid and wove, engine-sized writings, selling on spot from 2½d. to 4d. (5 to 8 cents) per pound; cream laid and wove, tub-sized writings, from 4¾d. to 6½d. (9½ to 13

cents) per pound; vellum, cream laid and wove, tub-sized or vat writings (probably in the United States this class of paper would be termed "bonds") sell at from 7d. to 11d. (14 to 22 cents) per pound; strong linen paper, such as that used for typewriting duplicates, sells on spot at from 7d. to 9½d. (14 to 19 cents). The prices here mentioned are for trade lots to printers, ex warehouse, and range from single reams to cases. The stock houses or jobbers expect about 25 per cent gross on their landed cost for this class of trade, as there are expenses of delivery, collection of accounts, warehouse charges, and del credere to be provided for.

Terms.—In the case of stock from warehouses, payments are made by the end of the month following the month of delivery, less 2½ per cent. For direct indents or importations, the practice varies. Some buyers will accept a ninety-day draft after sight; others demand one hundred and twenty days; some will pay cash on presentation of manufacturer's invoice; but as a rule it is preferred to purchase at a price delivered, with the terms of payment same as from stock—that is, about sixty days after delivery of goods. Large buyers take draft at ninety days' sight.

Packing.—Packing is usually done in cases of from 5 to 6 or from 4 to 6 cwts. (560 to 672 or 448 to 672 pounds), and is the best method; the cases being three-fourths of an inch to 1 inch thick, with three steel bands (one on each end and one in center) or twisted steel wire over them, and no outside battens. The cases should be well made and lined with tarred or waterproof paper or oilcloth before the reams are placed therein.

Consumption.—No official statistics as to the exact quantity of paper used in the colony are available, but the estimates of experts show that an amount of about £300,000 ($1,459,950) is in use every year. The principal consumption is wood-pulp news for the daily papers, some of which comes from the United States, some from Great Britain, and a great deal from Norway. First cost is about £9 ($43.79) per ton of 2,240 pounds free on board at place of export, and is packed on reels covered with packing paper and canvas. Next, the demand is for ordinary white printing paper for books, pamphlets, catalogues, posters, and the like, first cost of which is 2d. (4 cents) per pound free on board at port of export. The writing papers have already been mentioned. There is also a trade in colored papers for writing, printing, and wrapping, for bag papers in brown and cap, and for brown and manila. A great deal of brown paper is imported from Germany.

Tariff.—Writing and print, in original reams, free; other papers, which include all wrappings, tissues, blottings, bags, caps, and the like, 6s. ($1.46) per cwt. (112 pounds).

Dealers.—The following are the principal firms in this colony handling paper, all in Melbourne: Watson & Gladwin, 335 Flinders lane; Alex. Cowan & Co., Limited, 395 Flinders lane; William Detinold & Co., Limited, 126 Flinders lane; James Spicer & Sons, 313 Flinders lane; Sands & McDougal, 365 Collins street; Plaff, Pinschoff & Co., 314 Flinders lane; George Robertson & Co., 384 Little Collins street; S. Schuhkraftt, 132 Flinders lane; A. Jack & Co., 349 Flinders lane; G. H. Adams & Co., 235 Flinders lane; and Gordon & Gotch, 126 Queen street.

DANIEL W. MARATTA,
Consul-General.

MELBOURNE, *March 15, 1897.*

NEW CALEDONIA.

Kinds.—All kinds of writing paper, for office use or otherwise, are imported direct from France, and is of French manufacture. Owing to a prohibitive tariff, foreign-made paper is rarely to be met with here.

Prices.—Prices vary to such an extent that it is hardly possible to give an average price.

Dealers.—All the principal firms import from their French houses. The only two newspapers of the colony import their printing paper and material from Australia, but the quantity is so small that it is not worth mentioning.

There is no local manufactory of paper in this colony. All paper—ledgers, books, forms, etc.—used in Government offices come here direct from State factories in France.

S. REICHENBACH,
Acting Vice-Commercial Agent.

NOUMÉA, *March 17, 1897.*

CENTRAL AMERICA.

HONDURAS.

Kinds consumed.—No considerable quantity of fine writing paper is used in this country, the kinds in use being the ordinary and common grades. Very little linen paper is sold.

Prices.—The price of ordinary note paper (put up in reams of 500 sheets and weighing 10 pounds) is 10 cents per pound, exclusive of freight, duty, etc., and retails at about $2.25 per ream; the price

of cheap foolscap (put up in reams of 500 sheets, weighing 12 pounds) is 6 cents per pound, and retails at about $2.25 per ream; the price of best paper ordinarily sold here (put up in reams of 500 sheets, weighing 16 pounds) is 15 cents per pound, and retails at about $4.50 per ream.

Terms.—In case of goods bought in England and Germany (and most of them come from those countries), from six to nine months' time is given, while merchants of the United States give only three months. Payments are made by remittance of draft, etc.

Dealers.—There are no special dealers in paper. The following are the leading general merchants who handle paper: C. W. Campbell & Co., Santos Soto, Daniel Fortin, R. Streber, Samuel Lainez, Ignacio Argucia, Ramiro Fernandez, Benito Fernandez, Manuel Ugarte (director-general of rents, who buys paper for the Government), all of Tegucigalpa; J. Rossner & Co., Theodore Kohncke, Abadie & Co., of Amapala; Daniel Fortin and Monico Cordova, of Yuscaran; C. W. Clark & Co., of Puerto Cortez; and Jorge Bäh, Panting & Co., and J. M. Mitchell, of San Pedro Sula.

Packing.—Paper should be packed for shipment in water-tight packages of not more than 125 pounds. Most goods introduced into the country have to be freighted on mule back to the interior. Generally, merchants prefer paper put up in half reams of 250 sheets.

Quantities consumed.—No recent statistics of importations giving total quantities imported of special articles have been published. Judging by former reports, the quantity for the whole country might be estimated at about 100,000 pounds.

WM. M. LITTLE,
Consul.

TEGUCIGALPA, *March 16, 1897.*

Inquiry at some of the principal places where paper is sold in the Bay Islands of Honduras develops the fact that the paper trade here amounts to very little. Most of the paper used comes from the United States and is of American manufacture, put up in the common way—one-fourth of a ream in a package. Small quantities of foreign paper—too small to be considered—come here from Belize, British Honduras.

J. EUGENE JARNIGAN,
Consul.

UTILLA, *February 2, 1897.*

NICARAGUA.

Kinds and prices.—There is but little demand in this consular district (San Juan del Norte) for fine writing paper. The best I have seen in this country is that which is used in the office of the inspector-general of the Atlantic coast at Bluefields. It is cut in single sheets 13 3/16 by 8 9/16 inches, and has 22 lines of 5½ inches. I do not know its cost, and can not give its exact weight, as I have but two or three sheets. Its watermark is "Whiting's Linen Ledger, 1895." This will probably enable the trade to ascertain the weight and cost of the paper.

All the communications which I have received from the officials at Managua have been written on double sheets, as follows: (1) Size, 12 13/16 by 8⅝ inches, 32 lines, 7½ inches, 1 marginal ruling, weight 15 pounds per 480 sheets; (2) size, 12⅝ by 8½ inches, 27 full lines, weight 6 pounds per 480 sheets.

I am unable to give the cost or place of manufacture of such papers.

The writing paper imported into San Juan del Norte is of United States, English, and German manufacture.

Unless otherwise stated, all prices and values given in this report are expressed in United States currency.

The paper imported from England is described as follows:

Foolscap (superfine, white wove), double sheets; size, 13 by 8; 35 full lines; weight, 12 pounds per 472 sheets; cost price, $1.88 per 472 sheets; selling price, $2.25.

The paper imported from Germany is as follows:

(1) Small note (fine); double sheets; size, 7⅛ by 4½; 16 full lines; weight, 2 pounds per 500 sheets; cost price, 53 cents per 500 sheets; selling price, 75 cents.

(2) Commercial note (superior); double sheets; size, 8¾ by 5⅝; 48 full lines, 5 pounds per 500 sheets; cost price, 71 cents per 500 sheets; selling price, $1.50.

(3) Letter cap (fine); double sheets; size, 11⅜ by 8⅞; 63 full lines; weight, 8 pounds per 500 sheets; cost price, $1.19 per 500 sheets; selling price, $2.25.

(4) Letter cap (superior); double sheets; size, 11¼ by 8⅞; 27 full lines; weight, 8 pounds per 500 sheets; cost price, $1.19 per 500 sheets; selling price, $2.30.

(5) Unruled foolscap;* double sheets; size, 13⅝ by 8 1/16; weight,

*This is printing paper, but is sold for writing paper. It is marked "Papel de Imprimir Superior."

10 pounds per 500 sheets; cost price, 71 cents per 500 sheets; selling price, $1.60.

(6) Unruled foolscap (superior); double sheets; size, 13 by 8 5/16; weight, 15 pounds per 500 sheets; cost price, 83 cents per 500 sheets; selling price, $1.75.

(7) Ruled foolscap (fine); double sheets; size, 13½ by 8¾; 34 full lines; weight, 10 pounds per 500 sheets; cost price, 75 cents per 500 sheets; selling price, $1.60.

The paper imported from the United States is as follows:

(1) Commercial note (white laid, superfine), ruled; double sheets; size, 8 by 5¼; weight, 5 pounds per 480 sheets; cost price, 42½ cents per 480 sheets; selling price, $1.10.

(2) Commercial note (white wove); double sheets; size, 8 by 5; weight, 6 pounds per 480 sheets; cost prize, 70 cents per 480 sheets; selling price, $1.75.

(3) Letter cap (white laid, superfine), ruled; double sheets; size, 9¾ by 7 1/16; weight, 10 pounds per 480 sheets; cost price, 68 cents per 480 sheets; selling price, $1.75.

(4) Letter cap (white wove); double sheets; size, 9¾ by 7 1/16; weight, 10 pounds per 480 sheets; cost price, $1.12 per 480 sheets; selling price, $2.50.

(5) Foolscap (superfine); double sheets; size, 13 by 8 9/16; 29 full lines; weight, 12 pounds per 480 sheets; cost price, $2.30 per 480 sheets; selling price, $3.25.

The sizes reported are according to actual measurements. The actual measurement of paper billed as 13 by 8½ is 13 by 8 9/16. In every case, there is a variance between the billed and actual size.

It would seem as if some of the San Juan del Norte merchants pay for the same size of certain paper much more than other merchants pay for paper of better and finer quality, but this is easily accounted for. The merchants in San Juan del Norte have but very little knowledge regarding the actual value of any imported goods except flour, kerosene, liquors, beers, wines, and a few other articles. Nearly everything is bought through commission houses, and some of the prices paid are outrageously high.

I had occasion to make two reports a few months ago in relation to boots and shoes. Not a merchant in the place had ever heard of a welted sole.

For several years, foolscap paper was bought in the United States at from $1.40 to $1.50 per ream of 480 sheets, but most of the foolscap is now bought in England and Germany.

The paper and envelopes sold to the common people are manufactured in Germany. Such paper and envelopes are put up in pictured envelopes, upon which are printed the name of the local dealer,

each printed envelope containing five double sheets of thin paper, 6⅞ by 4 7/16, 17 full lines, five envelopes 4⅝ by 3¾, and one thin blotter. These packages are retailed at 5 cents each in Nicaraguan currency (a little less than 2½ cents in United States currency), and are said to cost the dealers about 2 cents (United States) delivered in San Juan del Norte. The names of the manufacturers do not appear on the packages. I inclose one of the packages herewith.* Twenty-five of these small packages are made up into a larger package, and are so shipped from Germany, the larger package, including covering, weighing 1 1/16 pounds.

There is no demand for legal cap. Writing tablets have not been introduced to any extent. All blotting papers are imported from the United States. Most of the blank books used, as stated in my report printed in CONSULAR REPORTS No. 199 (April, 1897), p. 457, are manufactured in the United States.

The Germans are great advertisers. Yesterday I was shown two sample books which had been sent out by a Hamburg house. One of the books has pasteboard covers, is 12 by 9, and contains 219 envelopes of various sizes, shades, and designs. The book is numbered 8064, and was received here about five months ago.

In one of my requisition letters, I requested that all envelopes not cloth lined sent to me by the Department should be ungummed, as, owing to the moist atmosphere here, all gummed envelopes (unlined) theretofore sent out by the Department could only be saved by inserting tissue or oiled paper beneath the flaps immediately upon receipt of the envelopes. The envelopes in the sample book mentioned, however, although they have been here five months, are in perfect condition, owing, undoubtedly, either to the preparation of the gum itself or to the application of some substance on the surface of the gum.

The other sample book sent out by the same house is cloth bound, 17½ by 12½ in size, and is numbered 25832. It contains samples as follows: Sixteen sheets of fine writing paper, various sizes, and sixteen envelopes to match; twenty sheets of black border and other styles of mourning paper, various sizes, and twenty envelopes to match; eighty-five sheets of writing paper, various sizes, shades, etc., and thirty-two envelopes, various sizes and designs. But three sheets of foolscap appear on each page of the sample book, and from four to six of note and letter paper on each page. List prices are as follows:

(1) Note, plain white; watermark, "Royal Paper;" size, 7 by 4 7/16; price, 90 pfennigs (21.42 cents) per 50 sheets and envelopes.

* Filed in the Bureau of Foreign Commerce, Department of State.

(2) Note, plain white; size, $8\frac{5}{16}$ by $4\frac{5}{16}$; watermark, "Royal Paper;" price, 1.30 marks (30.94 cents) per 50 sheets and envelopes.

(3) Note, plain white; watermark, "Fleury Mill;" size, $7\frac{1}{16}$ by $4\frac{7}{16}$; price, 60 pfennigs (14.28 cents) per 50 sheets and envelopes.

(4) Note, plain white; no watermark; size, 7 by 4½; price, 40 to 53 pfennigs (9.52 to 12.6 cents) per 50 sheets and envelopes.

(5) Commercial note, various shades; "Amistad" and other brands; size, 8¼ by 5¼; price, 50 pfennigs to 1.10 marks (11.9 to 26.2 cents) per 100 sheets and envelopes.

(6) Note, black border; watermark, "Fleury Mill;" size, 7 by 4½; price, 1 mark (23.8 cents) per 50 sheets and envelopes.

(7) Note, black border; watermark, "Royal Paper;" size, 7 by 4½; price, 1.15 marks (27.4 cents) per 50 sheets and envelopes.

(8) Note, black corner; watermark, "Original Congo Mill;" size, 8¼ by 5¼; price, 1.78 marks (42.4 cents) per 100 sheets and envelopes.

(9) Note, black border; no watermark; size, 8¼ by 5¼; price, 66 pfennigs to 1.14 marks (15.7 to 27.1 cents) per 100 sheets and envelopes.

(10) Commercial note, various shades; "Amistad" and other brands; average size, 8¼ by 5¼; price, 1 to 3.65 marks (23.8 to 86.9 cents per 480 sheets.

(11) Note, black border; no watermark; average size, 8 by 5¼; price, 2.30 to 3.35 marks (54.7 to 79.7 cents) per 480 sheets.

(12) Letter, various shades, sizes, and rulings; no watermark; price, 2.50 to 7.35 marks (59.5 cents to $1.75) per 480 sheets.

(13) Letter, black border; no watermark; average size, 10¾ by 8¼; price, 4.15 to 5.40 marks (98.9 cents to $1.28) per 480 sheets.

(14) Letter, single sheets; marginal ruling; size $10\frac{1}{16}$ by 8⅜; watermark, "Original Congo Mill;" price, 55 pfennigs (13.1 cents) per 100 sheets.

(15) Letter, single sheets; marginal ruling; average size, 10¾ by 8¼; no watermark; price, 55 to 70 pfennigs (13.1 to 16.7 cents) per 100 sheets.

(16) Foolscap, various shades, sizes, and rulings; no watermark; price, 2.17 to 6.20 marks (51.6 cents to $1.47) per 480 sheets.

(17) Trial balance; size, $10\frac{3}{16}$ by $8\frac{3}{16}$; price, 5.75 marks ($1.37) per 480 sheets.

(18) Trial balance; size, 13½ by 8½; price, 6 marks ($1.43) per 480 sheets.

(19) Trial balance, single sheets; size, 10¾ by 8¼; price, 7.05 marks ($1.68) per 480 sheets.

(20) Billheads, single sheets; size, 9⅛ by $7\frac{1}{16}$; price, 2.65 marks (63 cents) per 480 sheets.

(21) Printing paper, etc.; various kinds; price per kilogram (2 2046 pounds), 55 pfennigs to 1.65 marks (13.1 to 39.3 cents).

(22) Envelopes, various shapes, shades, and sizes; price, 2.50 to 11.70 marks (59.5 cents to $2.78) per 1,000.

Among the samples are sheets having an impress of the coat of arms of the Republic of Colombia, and others having an impress of the coat of arms of the Republic of Salvador.

The papers stamped "Republica de Colombia" are as follows:

(1) Note; size, $8\frac{5}{16}$ by $5\frac{5}{16}$; no watermark; price, 1.45 marks (34½ cents) per 480 sheets.

(2) Foolscap, 6 sizes, viz, $13\frac{5}{8}$ by $8\frac{3}{8}$, $12\frac{13}{16}$ by $8\frac{9}{16}$, 13 by $8\frac{5}{8}$, $13\frac{1}{4}$ by $8\frac{9}{16}$, $12\frac{7}{8}$ by 8½, $12\frac{5}{8}$ by $8\frac{3}{8}$, of 39, 33, 32, 38, 33, and 34 full lines, respectively; price per 480 sheets, respectively, 5.82, 3.42, 1.90, 4.12, 3.47, and 2.50 marks ($1.38½, 81.4 cents, 45 cents, 98 cents, 82½ cents, and 59½ cents.

The papers stamped "Republica del Salvador" are as follows:

Foolscap, 4 sizes, viz, $13\frac{7}{8}$ by $8\frac{3}{8}$, $12\frac{7}{8}$ by 8½, $13\frac{5}{8}$ by $8\frac{7}{16}$, 13½ by $8\frac{3}{8}$, of 35, 32, 39, and 35 full lines, respectively; price per 480 sheets, respectively, 6.20, 4.12, 2.82, and 2.50 marks ($1.47½, 98 cents, 67 cents, and 59.5 cents).

Terms.—German, English, and United States papers are sold on ninety days' time from date of invoices. Special arrangements are made with the commission houses.

Dealers.—All the merchants on this coast keep general stores and handle everything that is salable in the country. The principal importers in San Juan del Norte are F. A. Pellas, H. F. Bingham, C. F. Bergmann, and E. L. D'Souza & Bro. Dr. Joseph Johnstone and Dr. Henry de Soto own drug stores and import small quantities of goods, including stationery. Nearly everything imported into San Juan del Norte from the United States is bought through commission houses in New York—Munoz & Espriella acting for F. A. Pellas, A. P. Strout for C. F. Bergmann, and Andreas & Co. for H. F. Bingham and E. L. D'Souza & Bro.

Packing.—The mouth of this harbor is choked with sand, and all goods arriving here must be lightered from 1 to 2 miles. During the wet season, it rains for weeks at a time almost incessantly, and during the dry season there is more rain than in the very wettest season in most parts of the United States. Some of the lighters used have no covering but tarpaulin, and generally the seas run high on the bar.

Goods shipped from here to the interior must be transferred from one vessel to another from three to six times, depending upon the season of year, before reaching Granada.

San Juan del Norte is a free port, but all goods shipped from the town to the interior are subject to the payment of duties at Castillo. Customs duties are specific and are levied according to weight, including weight of outside packages.

Stationery destined for this port and for interior towns via the San Juan River should be packed in boxes having waterproof linings. Packages should be iron bound and not exceed 200 or 250 pounds each in weight; and while the boxes should be sufficiently strong, they should not be grossly heavy.

Quantities consumed.—The population of Nicaragua is about 375,000. There are three ports of entry in this consular district, viz, San Juan del Norte, Bluefields, and Cape Gracias-á-Dios, and two in the western district—Corinto and San Juan del Sur.

Our consular agent at Bluefields has been instructed to make report concerning the paper trade at Bluefields and Cape Gracias-á-Dios. His report will be transmitted to the Department.*

It is estimated that of the goods of all kinds imported into Nicaragua, 62.3 per cent are entered at Corinto, 4.3 per cent at San Juan del Sur, 22 per cent at Bluefields, 7.8 per cent at San Juan del Norte, and 3.6 per cent at Cape Gracias-á-Dios.

I have seen no statistics, however, showing either the value or quantity of stationery entered at each of the five ports mentioned. During the year ended June 30, 1895, 1 case of copy books, 3 cases of envelopes, 29 cases of writing paper, 2 cases of tablets, and 13 cases billed as containing "stationery" were imported into San Juan del Norte. The importations during the succeeding year were substantially the same.

The director-general of post-offices has made a report showing the number and weight of letters and other mail packages received at and dispatched from the principal post-offices in Nicaragua during the six months ended June 30, 1896. The post-offices mentioned are Bluefields, Cape de Gracias, Chinandega, Corinto, Estelé, Granada, Jinotega, Jinotepe, Juigalpa, Leon, Managua, Masaya, Matagalpa, Ocatal, Rama, Rivas, San Juan del Norte, San Juan del Sur, and Somoto.

An abstract from this report is given herewith, with additional columns showing the number of pounds received and dispatched. This abstract is made for the benefit of our merchants and manufacturers, as knowledge of the exact number of newspapers and business circulars reaching the people of any foreign country during a period of six months ought to be of some value to them in aiding them to determine whether it would pay them to do newspaper advertising in such country.

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* Report follows.

Packages received and dispatched during the six months ended June 30, 1896.

Description.	Number received.	Weight.		Number dispatched.	Weight.	
		Grams.	*Pounds.*		*Grams.*	*Pounds.*
Letters:						
Ordinary	199,954	2,496,497	5,503.78	211,742	2,125,774	4,686.48
Semiofficial	3,245	34,679	76.45	3,790	47,477	104.67
Official	25,864	447,895	987.43	24,026	452,833	998.32
Cards:						
Single	7,180	24,202	53.36	7,756	24,076	53.08
Double	199	1,192	2.63	267	893	1.97
Business circulars	194	65,273	143.9	362	11,432	25.2
Newspapers, etc.:						
Free	80,286	10,824,395	23,863.46	88,956	11,582,531	25,534.85
Postpaid	271,269	13,679,359	30,157.51	182,505	9,006,894	19,856.6
Samples	4,662	1,538,751	3,392.33	3,321	282,942	623.77
Registered letters:						
Ordinary	8,243	3,098,474	6,830.9	7,426	1,365,886	3,011.23
Official	4,571	4,114,805	9,071.5	4,963	4,106,955	9,054.19
Postal service	2,519	89,748	197.86	2,736	83,310	183.67
Return letters	894	12,971	28.6	899	13,713	30.23
Return receipts	11,470	57,540	126.85	12,126	59,046	130.17
Parcels:						
Ordinary	474	211,149	465.5	475	254,250	560.52
Official	2,676	1,222,784	2,695.75	1,837	1,552,824	3,423.36
Total	623,600	37,919,714	83,597.81	553,187	30,970,836	68,278.31

Most of the envelopes used are of light weight. Estimating the weight of envelopes at 1 pound per 100 envelopes, the 267,708 letters dispatched contained but 15,521 pounds of paper, assuming that they contained nothing but paper. It is quite probable, however, that the 12,814 registered letters contained very many pounds of other matter than writing paper. This would seem to indicate that the paper trade in Nicaragua is not very extensive.

Many of the dispatched letters, too, are reported not only from the mailing offices, but from dispatch offices in which they are distributed.

In 1895, with the assistance of Mr. Samuel Weil, of Bluefields, and Mr. Eugene Southworth, of Granada, I prepared a list of two hundred and forty-one articles imported into Nicaragua, according to which list the stationery entered at the ports of Corinto and San Juan del Sur is manufactured in the United States, England, France, and Germany, and that entered at Bluefields comes from Germany and the United States.

Freight rates, duties, etc.—Freight rates to Bluefields and San Juan del Norte are published in Highways of Commerce, pages 75–77. For changes subsequently made, for lighterage charges, duties, general statistics, etc., see my reports printed in CONSULAR REPORTS of July, October, and November, 1896.

THOMAS O'HARA,

SAN JUAN DEL NORTE, *February 24, 1897.* *Consul.*

I find, upon investigation, that no accurate report can be made upon the paper trade of Bluefields. All printing of a fine character, as well for the Government as business men and private individuals, is done in New Orleans; consequently, the paper itself is all purchased there.

The paper in question includes note and letter heads, billheads, statements, and legal cap.

Mr. Samuel Weil, a merchant of this place, recently returned from New Orleans, and the amount of printing he brought back with him was surprising.

No account of paper annually purchased by the merchants here can be ascertained.

The paper sold here in the town is of the cheapest kind and poorest quality. Five hundred reams would cover all that is disposed of in Bluefields and vicinity. The paper is all of American manufacture, the favorite brand being the "Phœnix."

Paper is retailed as follows, per ream (values being reduced to United States currency): Legal cap, $2.11; bill paper, $1.87; foolscap, $1.64; letter paper, $1.29; note paper, 82 cents.

M. J. CLANCY,
Consular Agent.

BLUEFIELDS, *May 24, 1897.*

SOUTH AMERICA.

ARGENTINE REPUBLIC.

Kinds consumed.—There is only one paper mill in the Argentine Republic, located at Zarate, in the province of Buenos Ayres. It is of limited capacity and is employed principally in turning out news and wrapping paper, for this purpose being well protected by the Argentine tariff. The great bulk of the various kinds of paper consumed in the Argentine Republic is imported. The total importations (custom-house values) for the last five years have been as follows:

1892	$1,615,948
1893	1,558,932
1894	1,822,331
1895	1,335,753
1896 (9 months)	1,377,291

RAW MATERIALS.

The importations of raw materials used here in the country in the manufacture of paper for the last four years were as follows (custom-house values):

1893	$528,837
1894	369,409
1895	222,552
1896 (9 months)	222,828

MANUFACTURED ARTICLES OF PAPER.

The custom-house value of the articles manufactured from paper imported into the country during the last five years was as follows:

1892	$674,832
1893	880,796
1894	1,004,766
1895	678,644
1896 (9 months)	547,045

TOTAL CONSUMPTION.

The total value of the importations of paper, of paper stock used in the manufacture of paper, and of articles manufactured from paper, for the last five years, was as follows (custom-house valuation):

1892	$2,687,956
1893	3,127,890
1894	3,194,506
1895	2,236,947
1896 (9 months)	2,147,164

The latest classified custom-house returns which have been published are for the year 1895, and from these I compile the following tables of importations of the different varieties of paper into the Argentine Republic.

WRITING PAPER.

The total imports of writing paper for 1895 amounted to $166,998, of which $150,217 passed through the Buenos Ayres custom-house and $15,105 through that at Rosario, and the small balance at various other custom-houses. The following are the countries from which it was imported:

Countries.	Quantity.	Value.
	Pounds.	
Germany	806,457	$73,147
Belgium	286,948	26,026
Spain	67,153	6,091
United States	11,444	1,037
France	39,886	3,618
Italy	292,634	26,542
Great Britain	308,995	28,025
Other countries	27,906	2,512
Total	1,841,423	166,998

The duty on writing paper is 3 cents specific per kilogram (2.2046 pounds). In boxes with envelopes, the duty is 25 per cent ad valorem. The finest ledger and blank-book papers come mostly from Great Britain and Germany, and the prices run from 8 to 20 cents per pound. Other writing paper—letter, note, and cap—is almost entirely German and Belgian, though considerable quantities also

come from Great Britain and Italy. The price runs from 10 to 24 cents per pound, according to quality, whether linen laid and wove, fine, superfine, or extra superfine.

NEWS PAPER.

The value of the importations of paper intended for newspapers during 1895 was $259,811, against $990,693 in 1894, a difference of $735,882, made good by the amount manufactured in the country. Of the imports, paper to the amount of $237,943 passed through the Buenos Ayres custom-house and $16,864 through the Rosario custom-house. The following are the countries from which it was received:

Countries.	Quantity.	Value.
	Pounds.	
Germany	4,782,954	$211,691
Belgium	231,867	10,515
United States	3,889	176
France	15,384	698
Italy	678,052	30,751
Great Britain	5,936	270
Other countries	15,651	710
Total	5,733,733	254,811

It will be seen that, except what is manufactured in the country, the paper for newspapers comes almost entirely from Germany. The duty for 1897 is 3 per cent specific per kilogram (2.2046 pounds). Most of this class of paper used in the country is a miserable article, with scarcely body enough to hold together with its own weight. The prices vary—3 to 10 cents for the better qualities.

BOOK PAPER.

This class of paper (papel para obros), used in job and book offices, is also, in great part, imported from Germany. The imports for 1895 amounted to $285,226, of which $277,716 passed through the Buenos Ayres custom-house and $7,731 through that of Rosario. The following are the countries from which it was imported:

Countries.	Quantity.	Value.
	Pounds.	
Germany	1,633,607	$148,170
Belgium	533,920	50,240
Spain	13,210	1,198
United States	58,380	5,294
France	19,463	1,765
Italy	517,871	46,973
Great Britain	349,755	32,722
Other countries	9,525	864
Total	3,155,731	286,226

Here, again, is seen the supremacy of Germany, which furnishes more than one-half of the book paper used in the Argentine Republic. The duty is 3 per cent specific per kilogram (2.2046 pounds). The custom-house valuation on this class of paper is 10 cents per kilogram, but for the best qualities the price runs up to 24 cents per kilogram.

DRAWING PAPER.

The quantity of drawing paper imported in 1895 was 7,128 kilograms (15,717 pounds), valued at $3,563, nearly all of which passed through the Buenos Ayres custom-house. The countries from which it was shipped were the following:

Countries.	Quantity.	Value.
	Pounds.	
Germany	4,029	$913
Belgium	3,286	745
France	6,287	1,426
Great Britain	1,886	427
Other countries	229	52
Total	15,717	3,563

The duty on drawing paper is 25 per cent ad valorem, the official value being fixed at 50 cents per kilogram (2.2046 pounds).

PAPER FOR BINDING PURPOSES.

The importations of paper used in bookbinding amounted in 1895 to 4,419 kilograms (9,744 pounds), valued at $2,211. It came from the following countries:

Countries.	Quantity.	Value.
	Pounds.	
Germany	2,289	$519
Belgium	6,132	1,392
United States	167	38
Great Britain	1,156	262
Total	9,744	2,211

These figures show a great falling off compared with those of 1894, when the quantity imported was 47,542 kilograms, valued at $24,532, but the difference is accounted for by the fact that not a little of this class of paper is now manufactured in the country. The duty on the imported article is 25 per cent on valuations ranging from 15 to 50 cents per kilogram.

WRAPPING PAPER.

The quantity of wrapping paper imported into this country in 1895 was 586,156 kilograms, valued at $93,489. It was imported from the following countries:

Countries.	Quantity.	Value.
	Kilograms.	
Germany	174,443	$28,172
Belgium	50,309	9,647
United States	2,653	409
France	18,139	2,745
Italy	302,897	46,059
Great Britain	33,064	5,601
Other countries	4,651	856
Total	586,156	93,489

Perhaps it will be something of a surprise to the paper makers of the United States to note that Italy furnishes fully one-half of the wrapping paper imported into the Argentine Republic. In 1892, the quantity from Italy was 321,537 kilograms (708,989 pounds), valued at $65,568; in 1893, it was 356,415 kilograms (785,895 pounds), valued at $68,508; and in 1894, it was 313,376 kilograms (690,994 pounds), valued at $63,977. The duty is 12 cents per kilogram (2.2046 pounds) on a value of 15 cents per kilogram, and it includes all kinds of paper for bags or wrapping, whether made from paper stock, straw, fiber, or "paja" grass. Of the imports for 1895, $76,900 came through the Buenos Ayres custom-house and $16,138 through that of Rosario.

CIGARETTE PAPER.

The quantity of smoking paper imported into the Argentine Republic in 1895 was 225,675 kilograms (497,613 pounds), valued at $180,539. It was imported from the following countries:

Countries.	Quantity.	Value.
	Pounds.	
Germany	155,613	$56,458
Belgium	233,878	84,853
Spain	25,971	9,423
France	61,442	22,291
Other countries	20,709	7,514
Total	497,613	180,539

Of these imports, $143,170 passed through the Buenos Ayres custom-house and $37,189 through the others. The duty on cigar-

ette paper is 25 per cent per kilogram (2.2046 pounds); its official value is 80 cents per kilogram.

SANDPAPER.

The quantity of sandpaper (papel de lija) imported into the Argentine Republic in 1895 was 6,291 reams, valued at $13,422. The greater portion came from the United States, as will be seen from the following returns:

Countries.	Quantity.	Value.
	Reams.	
Germany	785	$1,660
United States	4,686	9,514
Great Britain	743	2,010
Other countries	177	238
Total	6,391	$13,422

Nearly all the importations of sandpaper passed through the Buenos Ayres custom-house. The duty on sand and emery paper is 25 per cent on a valuation of $2.60 to $4.60 per ream.

DRYING PAPER.

The importations of drying, or porous, paper in 1895 amounted to 34,365 kilograms (75,774 pounds), valued at $17,182. It was imported from the following countries:

Countries.	Quantity.	Value.
	Pounds.	
Germany	24,193	$5,486
Belgium	5,294	1,201
United States	5,166	1,172
Great Britain	37,758	8,562
Other countries	3,363	821
Total	75,774	17,182

Nearly all these imports passed through the custom-house of Buenos Ayres. The duty is 25 per cent on a valuation of 40 cents per kilogram (2.2046 pounds).

TAPESTRY PAPER.

The imports of wall, or tapestry, papers for 1895 amounted to 286,645 kilograms (632,062 pounds), valued at $83,224. Of these,

about one-half came from Belgium, as will be seen from the following returns:

Countries.	Quantity.	Value.
	Pounds.	
Germany	182,120	$24,063
Belgium	289,560	37,386
United States	6,223	760
France	128,390	17,886
Great Britain	23,573	2,754
Other countries	2,196	375
Total	632,062	83,224

Of the imports of wall paper, $82,486 passed through the custom-house of Buenos Ayres and $738 through that of Rosario. The custom-house valuation of this class of paper is 25 cents per kilogram (2.2046 pounds) for ordinary print; 70 cents for gilded, silvered, or bronzed; $1 for velvet paper, plain; $1.80 for velvet paper, gilded, silvered, or bronzed; $2 for albuminated paper—in all cases gross weight. The duty is 25 cents ad valorem per kilogram.

SILK PAPER.

For the year 1895, the importations of silk paper were 30,861 kilograms (68,047 pounds), valued at $15,430, the most of it coming from Germany:

Countries.	Quantity.	Value.
	Pounds.	
Germany	41,587	$9,431
Belgium	6,925	1,570
United States	1,884	427
France	3,440	780
Italy	1,478	335
Great Britain	12,679	2,875
Other countries	54	12
Total	68,047	15,430

The whole passed through the custom-house of Buenos Ayres. The duty is 25 per cent ad valorem on a valuation of 40 cents per kilogram (2.2046 pounds).

PAPER FOR OTHER USES.

The total quantity imported in 1895 was 97,553 kilograms (215,104 pounds), valued at $48,776. It was imported from the following countries:

Countries.	Quantity.	Value.
	Pounds.	
Germany	126,948	$28,843
Belgium	26,200	5,943
Spain	1,080	245
United States	13,398	3,047
France	16,650	3,821
Italy	6,452	1,407
Great Britain	20,379	4,620
Other countries	3,997	850
Total	215,104	48,716

This article was almost exclusively imported through the custom-house of Buenos Ayres. The duty is 25 cents ad valorem on a value of 50 cents per kilogram.

PASTEBOARD.

The quantity of pasteboard, or carton, paper imported into the Argentine Republic during 1895 was 1,240,649 kilograms (2,735,730 pounds), valued at $129,444, of which about one-half came from Germany and nearly all the rest from Belgium. The following are the returns:

Countries.	Quantity.	Value.
	Pounds.	
Germany	1,371,528	$67,036
Belgium	1,098,727	48,623
Spain	7,332	498
United States	408	15
France	20,575	982
Italy	141,711	8,727
Great Britain	92,703	3,465
Other countries	2,714	98
Total	2,753,698	129,444

All this passed through the custom-house of Buenos Ayres. The duty on pasteboard is 25 per cent on a valuation of 8 cents per kilogram (2.2046 pounds) for ordinary and of 15 cents per kilogram for the finer qualities.

CARDBOARD.

The import of cardboard, especially for playing cards, in 1895, was 21,473 kilograms (47,348 pounds), valued at $3,320, of which 16,811 kilograms came from Spain, 2,741 kilograms from Germany, 740 kilograms from Italy, and the rest from France and Belgium, all of it passing through the Buenos Ayres custom-house. The imports of cardboard for other purposes than playing cards amounted in

1895 to 179,792 kilograms (396,441 pounds), valued at $37,118, and it came from the following countries:

Countries.	Quantity.	Value.
	Pounds.	
Germany	132,095	$11,376
Belgium	174,022	17,376
Spain	3,352	228
United States	2,363	262
France	16,313	1,321
Italy	60,230	5,670
Great Britain	7,440	843
Other countries	626	42
Total	396,441	37,118

The duty on cardboard, whether plain or for playing cards, is 25 per cent on a valuation of 25 cents per kilogram (2.2046 pounds).

PRIME MATERIALS.

I have, in the foregoing tables, included everything in the paper line imported into the Argentine Republic. I may add several articles which have likewise been imported as prime materials used in the manufacture of paper here in the country.

Potato starch.—The quantity imported in 1895 was 58,500 kilograms (128,992 pounds), valued at $23,910. Of this, 12,000 kilograms (26,400 pounds) came from Germany and 46,500 kilograms (102,532 pounds) from Italy. The duty is 2½ per cent ad valorem.

Paper stock.—The amount imported in 1895 was 4,322,037 kilograms (9,530,091 pounds), valued at $172,881. It all came from Belgium, except 711,316 kilograms (1,568,845 pounds), which was furnished by Great Britain. The duty is likewise 2½ per cent ad valorem.

Sulphate of ammonia.—The imports of this article amounted in 1895 to 257,586 kilograms (607,667 pounds), valued at $25,759. It all came from Belgium. The duty is 5 per cent on a valuation of $1 per kilogram (2.2046 pounds).

MANUFACTURED ARTICLES.

I add to this report the following articles manufactured from paper which were imported during the year 1895:

Albums.—The number of albums imported was 443 dozen, all of which came from Germany. Their value was $6,412. The duty is 25 per cent, the valuation being $2.50 per dozen for ordinary, $6 per dozen for fine, and $12 per dozen for leather. On the finer varieties, with ornamentation, the valuation runs from $25 to $250 per dozen.

Printed books and pamphlets.—The quantity imported was 404,145 kilograms (891,440 pounds), valued at $202,068. They were imported from the following countries:

Countries.	Quantity.	Value.
	Pounds.	
Germany	70,979	$16,094
Belgium	47,022	10,662
Spain	137,193	31,105
United States	66,979	15,187
France	186,214	41,725
Italy	211,318	47,918
Great Britain	119,986	27,639
Other countries	51,769	11,738
Total	891,440	202,068

The duty on printed matter generally is 5 per cent ad valorem on a valuation of 40 cents per kilogram (2.2046 pounds); on books bound in pasteboard, the duty is 25 per cent and the valuation 50 cents per kilogram; on books bound in russia leather or its imitations, the duty is 25 per cent on a valuation of $10 per kilogram; on books bound in pearl, tortoise shell, ivory, or fine metal, the duty is 25 per cent on a valuation of $25 per kilogram.

Blank books.—The blank books imported in 1895 amounted to 138,815 kilograms (306,087 pounds), valued at $76,066. They came from the following countries:

Countries.	Quantity.	Value.
	Pounds.	
Germany	64,240	$17,747
Belgium	31,814	9,668
Spain	7,991	1,840
United States	1,372	435
France	59,460	16,974
Italy	35,919	5,475
Great Britain	102,275	22,948
Other countries	3,016	979
Total	306,087	76,066

Of the blank books imported, $64,007 were entered at the custom-house of Buenos Ayres, the balance passing through that of Rosario. The duty on blank books is 25 per cent ad valorem. The official value of blank books in pasteboard is 30 cents per kilogram (2.2046 pounds; on blank books bound in leather, 70 cents per kilogram; on blank books in fine bindings, from $10 to $25 per kilogram.

Music.—The printed music imported in 1895 was 6,308 kilograms,

valued at $5,044. The printed music came from the following countries:

Countries.	Quantity.	Value.
	Pounds.	
Germany	9,009	$3,268
Belgium	265	96
Spain	536	194
United States	994	361
France	1,380	213
Italy	792	287
Great Britain	670	243
Other countries	267	382
Total	13,913	5,044

The reason there is so little music imported is that there are very few patents or commercial marks obtained for foreign music, and such music is at once republished in the country. The duty on printed music is 25 per cent on a valuation of 80 cents per kilogram (2.2046 pounds).

Playing cards.—Nearly all the playing cards are now manufactured in the country, the duty being quite exceptional, with a view to encourage home manufacturers. The quantity imported in 1895 was 349 gross, valued at $3,490. Nearly all the playing cards came from France, Italy, and Spain—the kind of cards generally used here being different from those in use in Great Britain and the United States. The duty on playing cards is $15 per gross, thus making their importation almost prohibitive.

Papier-maché.—The amount of the importation of the products of papier-maché in 1895 was $54,072, nearly one-half of which came from Germany; Belgium, France, and Great Britain furnished nearly all the rest, the United States being put down in the returns for $1,357. The duty is 25 per cent ad valorem on a valuation of 50 cents per kilogram (2.2046 pounds).

Photographic products.—This class of goods, which includes photographs, oleographs, engravings, maps, etc., were imported to the value of $13,813, nearly all from Germany, France, Italy, and Great Britain. The duty is 5 per cent ad valorem on a valuation of from $3 to $6 per dozen.

Other paper articles.—Besides the above, the custom-house returns show the importation of other printed matter and other paper products to the value of $327,870, most of these coming from Germany, Belgium, France, Italy, and Great Britain, the United States contributing to the value of $10,300. Whatever these unenumerated articles were, they paid a duty of 25 per cent on the declared value.

PACKING.

In regard to packing, different shippers have different ways. The larger sizes of paper for newspapers generally come rolled on strong spools or bobbins. The smaller sizes are packed flat. Book and writing papers are likewise usually packed flat, in ream packets of 500 sheets. Letter papers generally come in packets of 200 sheets, folded. For protection against dampness or moisture, in the case of fine papers, the boxes are tin lined.

TERMS OF SALE AND PAYMENT.

Like all other imported goods, the terms of sale or payment are conventional, depending on previous arrangement between the parties. Paper from the United States, when ordered direct, is generally cash on the signing of the bill of lading, or it is consigned to some banking house here, with the bill of lading, and delivered upon the payment of the amount to the bank. European firms are more liberal in their dealings with Argentine merchants, and, to well-accredited houses, they allow five or six months time, without interest.

PRINCIPAL FIRMS IN PAPER BUSINESS.

The names of the principal firms handling paper in this market are S. Ostwald & Co., E. A. Estrada & Co., Sinclair Gilchrist, Jacobo Penser, A. W. Best & Co., J. Schurer-Stolle, Mascias Rodriguez & Co., Wiengreen & Co., and Galli Hermanos, any or which, upon request, will furnish American merchants and manufacturers full details in regard to the kinds and qualities of papers most in request in the Argentine Republic.

E. L. BAKER,
Consul.

BUENOS AYRES, *March 22, 1897.*

BRAZIL.

PARA.

Imports.—All kinds of fine writing paper are imported, the best grades coming principally from France, with Germany next.

Prices.—Prices of the better grades range from 5 to 24 cents per pound; ordinary, from 40 cents to $2.40 per ream.

Terms.—With few exceptions, goods are sold on from sixty to ninety days' time. Payment is made by bills of exchange on London bankers at ninety days' sight.

Dealers.—The principal firms importing paper are Alfredo Silva & Co., A. Faciola, Tavares, Cardoso & Co., A. João de C. Macedo, and A. Carlos da Serra Ferreira.

Packing.—The finer grades are packed in boxes the same as any other merchandise for export.

Consumption.—The quantity of paper used annually is large. I could not obtain an approximation of the amount. All blank books and paper used by commercial houses are prepared here.

American paper.—It is claimed by dealers here that American paper is not much imported because American manufacturers do not send samples, prices, and terms, as European houses do. Each mail from Europe brings to the various dealers samples and prices, which enable them to place their orders where they can buy to the best advantage. If American manufacturers would adopt the same policy, there is no reason why they should not obtain a good share of this trade.

American mill machinery.—A paper mill equipped with American machinery was established here a little over three years ago, with a capital of $120,000, to manufacture the ordinary grades of paper, such as wrapping and paper used in printing newspapers. It was the intention to make paper from the fiber of the banana stalks, which, up to the present, has only been an experiment, from which satisfactory results have not been obtained. The mill is subsidized by the State with a guaranty of 6 per cent on the capital.

GEORGE G. MATHEWS, Jr.,
Consul.

PARA, *April 24, 1897.*

PERNAMBUCO.

Kinds consumed.—The kinds of fine writing paper in use in this district are ledger, bonds, linen laid and wove, fine, superfine, extra superfine—all flat, not folded. Fine ledger paper comes mostly from France, but of late small quantities have been introduced from the United States, purchased from the Carew Manufacturing Company, and have given entire satisfaction. The sizes and weights mostly in use for ledger purposes are:

Sizes.		Weights.	
Centimeters.	*Inches.*	*Kilograms.*	*Pounds.*
36 by 46	14.2 by 18.1	8 to 10	17.6 to 22
41 by 53	15.7 by 20.9	11 to 13	24 to 29
45 by 56	17.7 by 22	14 to 16	30.8 to 35.3
50 by 65	19.7 by 25.6	18 to 22	39.7 to 46.5
56 by 72	22 by 28.3	27 to 30	59.5 to 66.1
57 by 80	22.4 by 31.5	34 to 35	74.9 to 77.1
63 by 90	24.8 by 35.4	45 to 57	99.2 to 125.6

Bond paper of the best quality and of popular size is used here. Linen laid and wove, fine, superfine, and extra superfine come generally from Germany.

Prices.—Average prices of each kind are: Ledger paper, $24 per 100 kilograms (220.46 pounds) for common grades and $30 for the highest grade; bond paper, 12 cents per pound (mostly from United States); linen laid and wove, fine, superfine, and extra superfine range from 22 to 50 cents in boxes of 50 sheets and 50 envelopes.

Terms.—Terms of sale are three months' credit; terms of payment are ninety-day drafts.

Dealers.—The principal firms handling paper are: Laemert & Co., Arthur de Mattos, Ramiro M. Costa & Co., J. W. de Medeiros & Co., Israel & Braga, Nogueira Irmãos, Francisco Nogueira & Co., Hugo & Co., and F. P. Boulitreau.

Packing.—The manner of packing is usually in wood boxes, tin lined, holding about 200 pounds each. This can not be improved upon for the convenience of this market.

Quantities consumed.—Statistics are of such a character as to make it very difficult to ascertain the quantity of paper used, but the custom-house books taken as a guide would indicate that about $20,000 worth of the mentioned grades of paper are introduced annually.

JOHN MALCOLM JOHNSTONE,
PERNAMBUCO, *April 23, 1897.* *Consul.*

RIO DE JANEIRO.

I am indebted to Mr. John Crashley, of No. 67 Rua do Ouvidon, who does a large book and stationery business, for much of the information in this report.

Kinds consumed.—Bonds, linen laid (in small quantities), linen wove (in large quantities); fine, in medium-sized sheets about 47 by 58 centimeters (18.2 by 22.8 inches); flat, in reams of 500 sheets, weighing 14, 16, 18, and 22 pounds per ream (English and German manufacture); ledger paper, very little used. For general book work a heavier woven paper of different sizes and qualities is used.

Prices.—Average prices, from 7s. to 25s. ($1.70 to $6.08) per ream, approximately.

Terms.—Against ninety or one hundred and twenty days sight bills, through banks; bill of lading, either direct or through banks, against accepted bill.

Dealers.—Launeys & Co., 51 Rua General Camara; Luiz Macedo, 64 Rua da Quitauda; Ribeiro Macedo & Co., 72 Rua da Quitauda; Leuziugre Irmãos, 31 Rua do Ouvidon; Compañia Typographica do Brazil, 93 Rua das Invalidos; Mendes Marques & Co., 38 Rua do Ouvidon; Gepp, Edwards & Co., 64 Rua 1° de Março; Alexandre

Ribeiro & Co., Rua Hospicio; Henry Staltz & Co., 63 Rua do Alfaudega.

Packing.—Printing and writing paper of any kind should be packed separately, because of the difference in duties. Packages must be able to stand rough handling.

No statistics have been compiled by the custom-house as to the quantities or kinds of paper imported or consumed.

JOHN T. LEWIS,
Consul-General.

RIO DE JANEIRO, *March 25, 1897.*

RIO GRANDE DO SUL.

Kinds consumed.—The principal kinds of paper (all flat, not folded) used here are linen laid and wove, fine, and superfine. Bond and ledger are not imported.

Prices.—The average prices per ream of 480 sheets, 46 by 59 centimeters (18.1 by 23.2 inches), free on board at London, are: Linen laid, fine, $2.43; linen laid, superfine, $3.65; wove, fine, $2.19; wove, superfine, $2.43.

Terms.—The terms of sale are discount from 10 to 35 per cent. Nearly all stationery imported here is bought through commission houses in Europe. The terms of payment are frequently on presentation of bank draft, on bill of lading being handed over; at other times commissioners in Europe open a credit to their order givers, who remit after receipt of goods.

Dealers.—The principal firms handling paper are R. Strauch, Livraria Rio Grandense, Carlos Pinto & Co., successors to Livraria Americana, and Telles, jr.

Packing.—The paper is packed in various ways—fine qualities in cases, inferior and lighter qualities in hessians and baled, having top and bottom board covering and fastened with iron hoops.

FRANK G. BERG,
Vice-Consul.

RIO GRANDE DO SUL, *April 14, 1897.*

BRITISH GUIANA.

The trade in writing and printing paper is practically controlled by three firms or houses, who draw their supplies chiefly from Great Britain, and, to a less extent, from Holland and France.

The firms alluded to are Baldwin & Co., James Thomson, publisher of the Argosy (newspaper), and C. K. Jardine, proprietor of

the Daily Chronicle and printer to the Government of British Guiana. These houses have their business agents in Great Britain, all of long standing, through whom their supplies are obtained from first hands.

In connection with the subject, I subjoin a statement which has been prepared by Mr. C. K. Jardine at the request of this consulate, and which appears to cover all technical points in connection therewith, so far as information is obtainable.

Writing paper and stationery are not included in the schedule of specific duties, but are subject to the ad valorem rate of 10 per cent.

Under the heading "General imports into the colony of British Guiana," contained in the latest issue of the official blue book, the following particulars relative to paper are enumerated:

Countries.	Quantity.	Value.*	Duties (10 per cent).
Manufactures of paper.	*Packages.*		
United Kingdom	531	$7,178.32	$717.83
United States	99	863.70	86.37
British West Indies	2	117.74	11.77
Other countries	18	409.26	40.93
Total	650	8,569.02	856.90
Paper of wood or straw.			
United Kingdom	9,390	5,703.67	570.36
Holland	1,013	762.52	76.25
Total	10,403	6,466.19	646.61

* United States currency.

The above figures are, of course, general, and the contents, weight, and value of the packages enumerated not specified. In consequence of this, there is no way of arriving at an idea of even the approximate quantity of the different styles or qualities of writing paper imported.

It must be admitted that the present outlook for opening trade in the lines indicated by our American paper manufacturers is not encouraging in view of the depression that exists in all branches of trade and industry in this colony; but if, having this fact in view, our manufacturers still feel inclined to put forth an effort to establish trade relations, it would be advisable to send a representative with samples and full information as to the propositions they are prepared to make. Even with this precaution, the attainment of their object would be an uphill work, at least at the present time.

GUSTAV H. RICHTER,
Vice-Consul.

DEMERARA, *March 17, 1897.*

C. K. JARDINE TO VICE-CONSUL RICHTER.

OFFICE OF THE DAILY CHRONICLE,
Demerara, March 16, 1897.

DEAR SIR: In reply to your request for information relating to the paper trade of this colony, I have to state as follows:

Kinds.—Of fine writing papers, there is not a large variety used in this colony, and of handmade papers, hardly any except what is used for a few of the larger account books. Nearly all our fine writing papers are imported from Great Britain. The quality of writing papers comprise extra superfine, superfine, and fine tub-sized papers. Of engine-sized papers, a small quantity is also imported.

Prices.—The prices average from 3d. to 1s. per pound.

Terms.—Very few consignments of paper are received in this colony, nearly all that is imported coming on merchants' account, and through agents, most of whom are in London. The terms of payment are usually cash on receipt of invoice by agent, less 5 per cent discount.

Dealers.—There are only three firms in the colony handling writing papers; these are Baldwin & Co., James Thomson, and myself.

Packing.—All writing papers are packed in wooden cases lined with oilcloth, and the average weight of each package is 560 pounds.

Quantities consumed.—The approximate quantity of paper used in the colony in the course of a year I am unable to state.

C. K. JARDINE.

CHILE.

I have the honor to transmit the following, in reply to circular from the Department dated January 6, 1897, on the subject of fine writing papers.

Kinds consumed.—Fine writing papers consumed here are ledger, medium qualities of cream laid and wove, linen paper, and bonds, the two latter having comparatively small sale. Writing and account-book papers are mostly of English manufacture. Glazed printing and book papers, label and tinted papers are principally of German and Belgian manufacture. The average prices of these papers depends entirely upon the quality.

Prices.—Mr. L. F. Westcott, of the firm of Westcott & Co., a leading importing and jobbing house of this city, has kindly furnished me the following prices paid by them in Great Britain: Ledger, 8 to 15 cents per pound; medium quality of cream laid and wove, 6 to 12 cents; linen, 12 to 18 cents; and bonds, 12 to 18 cents (manufacturers' prices). Of the total quantity of paper of the classes referred to imported into Chile, only a small portion, not more than 15 per cent of the whole, will average 6 cents per pound, manufacturers' cost.

Terms.—The average credits extended by European houses to importers of these goods are from thirty to ninety days after receipt of bill of lading. Owing to the limited capital usually invested in the majority of the retail concerns, which look to the importer for their

supplies, credits are very carefully watched and the time allowed for payments does not, as a rule, exceed ninety days.

Dealers.—The principal firms importing and dealing in these goods are Westcott & Co., J. W. Hardy, Guillermo Helfmann, and Kiersinger & Co., of this city, and Hume & Co., of Santiago. These firms are now handling American paper to some extent, and can easily be induced to handle more. It would be advantageous to the manufacturers and exporters to send them samples. They can be sent in the mails, gotten up in book form, neat and attractive.

Packing.—The finer qualities of paper arrive here in cases, well packed, while the cheaper grades, to save freight, come in bales. The size and weight of packages are immaterial. There seems to be no preference in this respect, as transportation is entirely by rail and steamer, and all freights are calculated by cubic measure.

The question of entering this market depends entirely upon whether our manufacturers are able to compete in price and quality with those of Great Britain, Germany, and Belgium.

I desire to call their attention to the fact that a quantity of paper used by the Department of State, such as is forwarded for the use of this consulate (and if to this, of course, to other consulates and legations), is included in the class I am requested to report upon, and is of British manufacture. While they are clamoring for outside markets, our manufacturers permit the sale of foreign paper within 200 or 300 miles of their factories.

JAMES M. DOBBS,
Consul.

VALPARAISO, *March 31, 1897.*

COLOMBIA.

BARRANQUILLA.

Kinds and prices.—Official paper, 32 by 44 centimeters (12.6 by 17.3 inches) is imported from Germany, and costs there from 1.15 to 3 marks (27.4 to 70.5 cents) per ream of 400 sheets. Much of this paper is watermarked "Original Congo Mills." Letter paper from Germany, 22 by 27 centimeters (8.7 by 10.6 inches), in reams of 400 sheets, costs from 2.45 to 6 marks (57 cents to $1.41). The same sized paper from Milan, Italy, costs 4.25 francs (82 cents) per ream of 400 sheets.

A linen paper 22 by 27 centimeters (8.7 by 10.6 inches) is imported from France; also, fine and superfine in the same sizes. The wholesale prices are refused me, but the retail prices are, for the linen, in reams of 500 sheets, $4 (gold), and for the fine and superfine, $2.40 to $2.80. I found a fine white paper used for printing bills of lading, watermarked with a bull's head and "Howard Jones, London."

Ledgers and journals imported from France, 30 by 44 centimeters (11.8 by 17.3 inches), brass corners, cost 60 francs ($11.58).

Merchants here do not buy from the manufacturer direct, but through commission houses. They order printing paper and packing paper by the pound, but official and writing paper always by the ream. All official paper, as well as writing paper imported, is folded.

Terms.—On merchandise from the United States, three to four months is given, with interest at the rate of 6 per cent, charged from date of invoice, but if cash is paid, the commission house handling the merchandise charges only 2 per cent commission. Europe gives from six to eight months, with 6 per cent interest from date of invoice; if cash is paid, a discount of 2 to 3 per cent is allowed.

Dealers.—Villan, Bell & Co., Oswald Berne & Co., Gieseken, Ringe & Co., Flohr, Price & Co., Correa & Helm, A. Brun, Lopez Penha, J. A. Glen, M. S. Insignares, Pacini y Hermano, J. Martinez, S. Senior, De Sola & Co., Wehdeking, Focke & Co., Castellano & Co., and La Compañia Colombiana de Transportes (for their own use).

Packing.—Official paper from Germany is packed in bales of from 12 to 25 reams, according to weight of paper, which weigh about 125 pounds. The bales are wrapped in strong paper and covered with burlap, with half-inch boards on top and bottom of packages, secured by two bands of hoop iron. Paper packed in this manner arrives in good order. Letter paper from France and Italy is packed in boxes (the boxes are strong but light, as duty is paid by weight of entire package). If the merchandise is intended for the coast towns, the box or package may be of any size, but if intended for the interior, it must be in boxes or packages of 125 pounds, well and securely packed so as to keep dry and of such shape as to be easily transported on mule back. A mule load is from 250 to 260 pounds.

Quantities consumed.—During the year 1896 about $36,000 worth was imported through the Barranquilla custom-house.

The seaport towns of Rio Hacha and Santa Marta, with populations of 5,000 and 7,000, respectively, import only that paper which is required for their own use. During the year ended June, 1896, Rio Hacha imported from Europe 2,079 pounds of all classes of paper. The dealers in Rio Hacha are Victor Dugand and T. V. Henriquez.

Santa Marta, the capital of the department, imports about 7,000 pounds of all classes of paper. The dealers there are A. Perez, Manuel Avendaños, S. Francisco Noguera, Pedro Sales, and Diez Granados y Hermanos. The buyer for the department government is Joaquin Cevallos.

JOHN BIDLAKE,

BARRANQUILLA, *February 6, 1897.* *Consul.*

BOGOTÁ.

Kinds consumed.—Fine linen paper is only imported into this country for use in private correspondence. It is not introduced flat, but cut in quarto size, in single and double sheets, mostly ruled. A small quantity (about 20 per cent) is imported in foolscap size for legal purposes. In commercial circles, the paper most in use is "Crane Brothers' Japanese linen," either woven or laid, and similar qualities of different weights. Paper is sold here in reams of 400 sheets, quarto size. It is usually ordered in blocks of 100 sheets.

Prices.—It is not the custom here to sell paper by the pound, but by the ream, which is worth, in Bogotá, from $10 to $16 (Colombian), according to weight. Present exchange for United States gold is 150 per cent premium.

Terms.—Cash.

Dealers.—Camacho Roldan & Tamayo, Rafael Balcazer, Jorge Roa, and José M. Samper Matiz.

Packing.—Fine paper should be packed in cases of 160 to 170 pounds gross. Cases should be lined with tin or covered with waterproof cloth.

Quantities consumed.—It is estimated that the quantity of fine writing paper imported yearly into Bogotá amounts to about 2,000 reams. Duties are paid on gross weight; it is therefore recommended that the cases be light, but strong.

JACOB SLEEPER,
Consul-General.

BOGOTÁ, *April 25, 1897.*

CUCUTA.

Owing to the peculiar condition of trade here it is difficult to reply to the circular of the Department with regard to paper, and the following is all the information I am able to furnish on the subject.

Kinds consumed.—Fine writing paper is not in great demand here, and little or none is imported for sale. All large houses import their own stationery for use in their offices.

Price.—The business, as conducted here, is entirely retail, and the paper is sold by the ream or less, and on the average at about $4.

Terms.—Terms of sale are from cash to six months, depending entirely on quantity bought. All buying is done in the United States and Europe, on the basis of four to nine months. Terms of payment, however, depend almost entirely on whether the account is covered in coffee or by drafts.

Dealers.—There are no firms here who deal exclusively in paper. Practically, all the firms named in the Commercial Directory of American Republics import more or less paper.

Packing.—Goods should never be shipped in packages weighing more than 125 kilograms (275 pounds). The French system of packing—in square, wooden boxes, with iron bands at the corners, each weighing 62½ kilograms (138 pounds)—is the best.

Quantities consumed.—In the absence of statistics, it is absolutely impossible to make a sufficiently accurate estimate of the approximate quantity of paper used here.

PHILIP TILLINGHAST, Jr.,
Consular Agent.

CUCUTA, *May 27, 1897.*

PANAMA.

Kinds consumed.—The paper for writing is, as a rule, linen (either ruled or unruled), fine, superfine, letter, cap, and note. American extra superfine is not used here on account of the dampness of the climate. Irish, Belgian, German, and French extra superfine is used.

Prices.—Paper is not sold by the pound, except wrapping paper. It is sold by the ream. Through the kindness of a French dealer, Mr. Heurtematte, I am enabled to give selling figures here for several makes:

Marks.	Price per ream.	
Cap.	*Pesos.*	
3 P, not ruled	2.20	$1.03
Ruled:		
305	3.00	1.40
303	3.50	1.64
858	4.00	1.87
302	4.00	1.87
Letter, ruled.		
8 K, American	1.40	.65½
French:		
6 K	1.40	.65½
3 Faber	1.50	.70
439 Cc D	2.00	.94
438 Cu D	2.00	.94
10 K	2.20	1.03
884 K	2.40	1.12

Paper for newspapers is all American. For the dailies, very large size, $6.50 ($3.04 in United States currency) per ream; for the weeklies, large size, $7.50 ($3.51 in United States currency) per ream.

Good American paper for job work is worth from 4 to 12 pesos ($1.87 to $5.62) per ream, and colored paper the same price. White paper for posters is worth $4 (Colombian) per ream. All this paper comes from the United States.

Wrapping paper of wood pulp or straw is worth 2 cents (United States) per pound. Norwegian seems to have the preference. Fine

wrapping paper comes from Paris, and is worth 23½ cents (11 cents in United States currency), delivered here.

Terms.—Large lots are sold somewhat cheaper than the foregoing. Terms of payment, from four to six months.

Dealers.—The Star and Herald Publishing Company, El Chronista Publishing Company, N. Remon, M. Heurtematte & Co., and Y. Preciado. Well-to-do merchants, as a rule, import their own paper.

Packing.—No better packing can be done than that by our dispatch agent in New York—Mr. I. P. Roosa—a solid, wooden box, lined with tin. For any point on the coast, the size of the package does not matter; but when it is to be packed on mules, the package should not weigh over 125 pounds and should be of proper shape for such mode of conveyance. It would be better when it is to be loaded on mules that the inside tin cover be hermetically sealed or soldered.

Quantities consumed.—As near as I can find out, the value of the paper consumed in Panama amounts to from 25,000 to 30,000 pesos ($12,700 to $14,040) per annum.

The paper used by the newspapers and the wrapping paper, whether wood pulp or straw, is not included in the foregoing estimate. Neither does the estimate include the paper used by the Panama Railroad, the Pacific Mail Steamship Company, and the Panama Canal Company. These companies use more paper than all the rest of the town. The two former companies get all their stationery from the United States; the latter company from France.

As a whole, the paper of the United States gives fair satisfaction, but the price is from 25 to 30 per cent higher than the European.

The great trouble with paper here is the blurring, more particularly with United States paper. Some chemical preparation should be devised to prevent this.

Nearly all books—that is to say, ledgers, hotel registers, etc.—come from Europe. Books from the United States, with the exception of those sent by the Department of State, can hardly be used after two or three years, on account of blurring. There are records in this office the writing of which has become so dim that they can hardly be read. Whether this is due to the ink or the climate, I can not say—to both, probably.

American envelopes are very defective on account of the mucilage. It is impossible to open them without wetting. This is not the case with European envelopes.

Mr. Heurtematte receives much writing paper from the United States, not because he wants to, but because he is an exporter and importer. He showed me a bill rendered by a house in New York for a lot of supplies. This bill was on splendid paper, and, of course,

it was American paper, but the paper sent to Mr. Heurtematte did not begin to compare with it, although first-class paper was called and paid for.

I have sample books of all sorts of European papers, and I will forward them, should the Department so desire. I do not send them with this report because of the postage expense.

VICTOR VIFQUAIN,
Consul-General.

PANAMA, *February 21, 1897.*

ECUADOR.

Owing to the dreadful condition of the city, brought about by the fire of October and the immense amount of sickness—the health conditions being worse than ever known in recent years—I have found it impossible to get any data of value. From one-third to one-half of all employees in mercantile houses have been sick for the last three months and there is no sign of improvement yet. So it is impossible to get the attention of any one long enough to give any information of a definite character.

I can only report in a general way that the great bulk of the papers used by the people in general is imported from Spain or France, and that used by the commercial houses, from those countries, England, the United States, and Germany. The stamped paper of the Government comes from the United States or England, sometimes one, sometimes the other. The bank bills are supplied by the American Bank Note Company.

I will say, further, that in a country like this, such information as is desired could only be satisfactorily obtained by an expert representative of dealers or manufacturers, who would spend weeks or months of investigation. The dealers in these countries are very loath to give up the secrets of their business.

The principal importers of writing papers and stationery are Pedro Janer y Hijo, Manuel Orantia, Novero & Co., and Noverto, Osa & Co.

GEORGE G. DILLARD,
Consul-General.

GUAYAQUIL, *March 27, 1897.*

PARAGUAY.

The paper dealers here are all Germans and import all their paper direct from Germany or through houses in Montevideo. There is no paper manufactured in the country, and I find these dealers rather loath to give any information. The information de-

sired by the Department will have to be secured from the bureau of information. I shall make every effort to secure the same and forward as directed.

SAMUEL W. THOMÉ,
ASUNCION, *March 2, 1897.* *Consul.*

PERU.

Kinds consumed.—Ledgers, for fine-class blank books, flat, average weight 36 to 40 pounds, medium and royal; bonds, for shares, etc., average 32 pounds; double foolscap; linens, laid, principally for correspondence (letters, etc.), in commercial, letter, and note size—when plain, packed flat, in reams of 500; when ruled, folded, in half-reams. The paper consumed in Peru is chiefly German and Belgian.

Prices.—Ledgers, 16 to 24 cents per pound; bonds, 24 to 36 cents per pound; letter papers, etc., 12 cents per pound.

Terms.—Terms of sale, according to customer; terms of payment range from ninety days after receipt of goods to six months from date of invoice, some factories giving longer time than others.

Dealers.—Colville & Co. and J. Newton, at Callao, and Imprenta Gil, at Lima.

Packing.—Fine papers, in cases, up to 300 pounds per case.

Quantities consumed.—It is impossible to form an estimate of the quantity of paper used.

LEON JASTREMSKI,
CALLAO, *March 13, 1897.* *Consul.*

URUGUAY.

Kinds and prices.—The average price of white papers for duty purposes can be easily calculated, taking the amount of kilograms of each kind and the value thereof. Regarding the actual prices paid for the various kinds of papers at the place of purchase, I have to say that merchants here are not inclined to make statements in such direction, but judge that our paper manufacturers are well posted as to the prices ruling in Europe on the various kinds.

Terms.—The terms of sales are generally long, about six months, against notes. Terms of payment, according to agreement. Payments are generally made through the banks here upon London, of which they are branches.

Dealers.—There are two principal firms, wholesale jobbers, handling paper—Schmidt & Franco and Barreiro y Ramos—and a number of smaller firms, together with the newspaper publishers, who buy and import direct.

Packing.—The packing of the paper should, in my judgment, be the same as in the United States—packages of one-fourth and one-

half reams for writing. As to the printing paper, I refer to my report on the "Paper trade of Uruguay," CONSULAR REPORTS No. 192 (September, 1896), p. 176.

Quantities consumed.—The following tables show the full extent of the paper trade of Uruguay in all its branches for the calendar year 1896:

Imported from—	Value.	Imported from—	Value.
Germany	$118,954.42	United States	$5,241.58
Belgium	110,634.51	Brazil	59.20
Italy	71,149.94	Portugal	35.00
England	37,758.11	Paraguay	5.90
Argentine Republic	18,898.49	Total	385,188,91
France	15,196.60		
Spain	7,255.16		

Details of the imports of paper into Uruguay in 1896.

Whence and kinds imported.	Quantity.	Value.
Printed paper (value, $2.50 per kilogram; duty, $1 per kilogram, plus 5 per cent, plus 2½ per cent=7½ per cent).	*Kilograms.*	
England		$2,448.07
Italy		1,879.72
France		1,452.41
Germany		1,330.59
Belgium		692.90
Argentine Republic		252.62
Paraguay		2.50
Total		8,058.81
Writing paper (value, 35 cents per kilogram; duty, 31 per cent, plus 5 per cent, plus 2½ per cent=38½ per cent).		
Belgium	51,474	34,092.80
Italy	31,838	11,373.50
Spain	13,418	4,716.60
Germany	13,116	4,678.60
France	10,395	3,940.45
England	5,435	2,111.52
Argentine Republic	8,075	1,972.50
United States	10	3.50
Paraguay	5	3.40
Portugal	50	35.00
Total	133,816	62,927.87
Wrapping paper (value, 15 cents per kilogram; duty, 5 per cent, plus 2½ per cent=7½ per cent; specific duty, 5 cents per kilogram).		
Italy	322,168	51,546.88
Germany	103,425	16,548.00
Belgium	26,357	4,217.12
France	20,253	3,240.48
Spain	15,866	2,538.56
England	13,278	2,124.48
Argentine Republic	6,519	1,043.04
United States	2,868	458.88
Brazil	370	59.20
Total	511,104	81,776.64

Details of the imports of paper into Uruguay in 1896—Continued.

Whence and kinds imported.	Quantity.	Value.
*Printing paper (value, 14 cents per kilogram: duty, 8 per cent, plus 5 per cent, plus 2½ per cent=15½ per cent. *)*	*Kilograms.*	
Germany	670,652	$93,891.28
Belgium	509,946	71,392.44
England	207,213	29,009.82
Argentine Republic	109,752	15,365.28
Italy	40,092	5,612.88
France	24,169	3,383.66
United States	18,790	2,630.60
Total	1,580,614	221,285.96
Silk paper (value, 10 cents per kilogram: duty, 5 per cent, plus 2½ per cent= 7½ per cent: specific duty, 5 cents per kilogram).		
England	6	2.10
Sandpaper (value, 20 cents per kilogram: duty, 31 per cent, plus 5 per cent, plus 2½ per cent=38½ per cent).		
United States	10,527	2,105.40
England	1,881	376.20
Germany	348	69.60
Belgium	225	45.00
Argentine Republic	37	7.40
Total	13,018	2,603.60
Tin-foil paper (value, 56 cents per kilogram).		
Germany	2,377	1,331.12
Italy	1,316	736.96
France	562	314.72
England	100	56.00
Total	4,355	2,438.80
Wall paper (value, 36 cents per kilogram; duty, 31 per cent, plus 5 per cent, plus 2½ per cent=38½ per cent).		
France	7,958	2,864.88
Germany	2,968	1,068.48
England	1,152	418.92
Argentine Republic	536	192.90
United States	120	43.20
Belgium	175	63.00
Total	12,909	4,651.38
Blotting paper (value, 35 cents per kilogram: duty, 31 per cent, plus 5 per cent, plus 2½ per cent=38½ per cent).		
England	3,460	1,211.00
Belgium	375	131.25
Argentine Republic	185	64.75
Germany	105	36.75
Total	4,125	1,443.75

* The sizes of printing paper are generally 54 by 87 centimeters (21.3 by 34.3 inches). It comes in large packages, no cylinder presses being in use here yet.

I have to repeat that, in order to reach this trade, it will require the sending out of salesmen or the establishment of permanent agencies here with full lines of samples.

EDGAR SCHRAMM,

MONTEVIDEO, *March 9, 1897.* *Consul.*

VENEZUELA.

I find a diffidence on the part of the importers of Puerto Cabello to give information regarding source, price, terms of sale, etc.

Kinds consumed.—There are no fine writing papers imported into Puerto Cabello. I have never been able to obtain linen or other superior kinds. The sizes obtainable are foolscap, letter, and note, the two former also ruled for accounts; there is no binding done here, all blank books being imported principally from Germany.

The main source of supply is Germany, Austria, and Switzerland, with lesser quantities from France and Belgium.

Owing to lack of statistics, I regret being unable to furnish the amount of imports.

Dealers.—The names of firms engaged in this trade in Puerto Cabello are Messrs. Mestern & Co., W. Albrect, Kolster & Romer, Otto Redler & Co., and L. Seidel & Co.

Inquiries directed to these parties, with samples of paper, would no doubt produce good results. More direct results would be obtained by sending a representative to visit this country, and thus personally force sales throughout Venezuela.

WM. H. VOLKMAR,

PUERTO CABELLO, *February 10, 1897.* *Vice-Consul.*

TELEGRAPHY WITHOUT WIRES IN GERMANY.

Some years ago, efforts were made, with but partial success, to telegraph without connecting wire from the mainland to an island by using the sympathy that is shown by a wire buried in the earth on the island when a charge of electricity was sent through a similar wire buried on the mainland. In some cases, faint reactions were noted in the island wire, and it was hoped that by passing and discontinuing the charge through one buried wire the ticks might be registered by the other, and thus a sympathetic telegraphy be perfected.

Large sheets of copper were also tried in place of wire, also wires wound round buried magnets; but it was found that the earth diffused the electricity so much that nothing of practical value ensued. Other experimenters, considering the extraordinary resemblances between the action of electric waves and light waves through the air, sought for means to send electricity through the air itself. This has been accomplished in England by Marconi, whose fame reached America some time ago. But since it may be that no popular de-

scription of his method has been published, and since the experiments of Professor Rubens, of Frankfort, instructor in electric physics at the Berlin Polytechnic, have helped to make the method more precise, I venture to send the following report:

Marconi experimented from the British mainland to an island 4 marine miles distant. He used a generator of electric waves invented by the late Professor Herz, which generator throws the waves of electricity in all directions, as the rays of light emanate on all sides from a flame.

The problem was to concentrate these rays or waves of electricity in one direction, namely, toward the island. This he did by placing a concave mirror behind the Herz generator, by which the waves were reflected and made parallel in the required direction. On the island he placed what is called a "coherer," that is to say, a tube filled with particles of metal of just the right size and quality for the purposes now to be set forth. The coherer was set before another concave mirror, so placed that it would catch the electric waves coming parallel across the water from the concave mirror and Herz generator on the mainland. The coherer was set exactly at the focus. Imagine that the Herz generator on the mainland is a flame whose light rays are caught by a concave mirror, thrown over to the island, caught there in another concave mirror and focused on the coherer.

Now, the metal particles in this coherer are so adjusted as to size that the whole may be likened to a violin string, which vibrates when a certain sound is made by the voice.

As one can tune a violin string to a certain note, so one can find the metal particles that will vibrate to an electric wave of a certain size. Try to pass an electric current through these particles at ordinary times and there will be no result; but when the waves generated by the Herz generator, coming from a distance, fall on these particles a vibration is set up in them, they touch each other, and a charge of electricity applied to the tube is allowed to pass through and can be registered in the usual way.

Thus, the coherer, being supplied with an ordinary battery and Morse electro-magnet, permits the circuit to be closed when the electric waves from the mainland reach it. The click is registered only when the rays or waves from the Herz generator are reflected on it.

The electric waves are not believed to be vibrations in the air itself, but rather in the ether between the particles of air. As compared to light waves, they are of enormous relative size. It will be noted that the electric current on the island sent through the coherer has no other office than to strengthen and register the effects of these waves or rays caught by the concave mirror and focused upon the coherer.

That the electric waves do in many ways act like light rays, though they are much longer, I saw recently demonstrated in a lecture I was permitted to attend at the Polytechnicum in Charlottenburg-Berlin. To get some idea of the relative size of electric waves when compared with those of light, imagine that the light waves are represented by the width of the Hudson River at New York City; then the electric waves would be represented by the Atlantic Ocean and Baltic Sea, say from New York to St. Petersburg.

Or, to express it in sound waves, the waves of light are so high and sharp, while those of electricity are so long and deep, that the light waves may be compared to the highest, shrillest sound which the human ear can grasp, while those of electricity are comparable to the deepest diapason note of an organ.

The lecture I allude to was one which Professor Rubens, a young German of Dutch descent, now employed as instructor at the Polytechnic, gave to a number of teachers. Since Herz's death in 1888, he said, much progress has been made in reducing the size of the electric-wave generator. As the size of the apparatus has a relation to the length of the electric waves, and as it was desirable to shorten these waves, the decreased size of the apparatus has been of use in making air telegraphy more practicable. Shorter electric waves are more approximate in their action to waves of light, and go further. Up to the present, the shortest are those of the Russian experimenter Lebedew, who has produced them from 6 to 7 millimeters long. Professor Rubens showed a thermo element, or heat catcher, invented by himself to take the place of Marconi's coherer, which catches, like the coherer, the refracted and focused electric rays. The spark, he observed, was not at all a necessary phenomenon in electricity. He then made many curious experiments to show the similarity in action of waves of light and waves of electricity, and also drew attention to the very different way in which electric and light waves pass through different substances. Thus he reflected electric waves like light, refracted them with prisms, and diffracted them with a wire grating of parallel wires, as light is diffracted by Langley's grating. He then showed the polarization of these rays—freely, through the fibers of wood longitudinally; and badly, across the fiber; easily, through closed books with the leaves; and with difficulty, across. Thus, a pile of books or sheets of glass showed polarization like crystals under light. He showed, also, that, on account of the length of these waves, their energy was absorbed differently by different substances; thus, (1) water absorbs all the energy, (2) metals absorb all the energy, (3) glass absorbs nearly all, (4) paraffin absorbs hardly any, and (5) hard rubber absorbs hardly any. Thus they move through hard, black rubber and paraffin as light moves through air, glass, or water—that

is to say, with hardly any resistance—while glass lets very little of them through, and metal and water are impervious to them.

Professor Rubens imbeds his Herz generator in petroleum for better isolation, and as a handy concentrator of the electric waves or lens, uses a round, glass bottle filled with petroleum. By placing in turn the glass prism, wire grating, block of wood, pile of books, water, paraffin, and hard rubber in the line of the unseen electric waves pouring from the generator and concentrator toward the wave catcher, he showed on an indicator the passage, easy or retarded, of the unseen flow or its entire interruption.

Of course, it is difficult by verbal description to make experiments of this kind clear, but I trust that this summary description may be of use to experimenters or stimulate inventors to solve in a simpler and more effective way the problem of telegraphy through the air.

CHARLES DE KAY,

BERLIN, *June 24, 1897.* *Consul-General.*

FOREIGN COMMERCIAL TRAVELERS IN EUROPE.

The following is a summary of the requirements of foreign commercial travelers in the various European states in respect to identification, licenses, fees, customs duties on samples, etc. I trust that it will be found useful to those who desire to send travelers abroad. I may add that it is based on the latest regulations issued by the various governments.

Germany and Austria-Hungary.—Foreign commercial travelers are required to carry with them a certificate of identification containing a personal description of the owner. The certificate is to be obtained from the authorities in the traveler's place of residence. A trade tax is not charged, if it can be shown that such is paid by the firm at their home. Sample cards having no commercial value and suited for samples only, are duty free; other kinds of samples are to bear some mark to identify them, such as a seal of wax or lead, or something similar, and must be mentioned on a special sample pass. The duty levied is returned, provided the samples are produced as unsold within a time previously specified.

Switzerland.—The license required is based on that issued by the home authorities. This license costs 100 francs ($19.30) for six months and 150 francs ($28.95) for the year. The regulations as to duty on samples are the same as in Germany.

Italy.—The license of the home authorities suffices. German commercial travelers are exempt from a trade tax, as per stipulation

in the German-Italian commercial treaty. Samples are subject to the same customs regulations as in Germany.

Belgium.—Only the home license is required. The tax is 25 francs ($4.82), but German travelers are exempt, owing to reciprocity in this respect. With regard to customs duty, the samples are treated as in Germany; but German samples that bear a German customs mark do not have to receive a Belgian one on entering the territory, and Belgian samples marked by a Belgian custom-house do not have to be re-marked on entering Germany.

Holland.—The tax is 15 florins ($6.03). Samples of small value are duty free. In other respects, the customs regulations are similar to those in Germany.

Denmark.—The license to be taken out is based on that issued by home authorities. The firm represented must be stated on the license. The tax is 160 crowns ($42.88); if, however, more than one firm is represented, a tax of 80 crowns ($21.44) for each additional firm is charged. Moreover, foreign commercial travelers are only allowed to do business in the larger cities. The customs duty on samples is returned, provided the same are taken out of the country again within three months.

Sweden and Norway.—Here the regulations are exceptionally stringent. Every foreign commercial traveler has to take out a trading license at the nearest police station immediately upon landing, for which he is to pay 100 crowns ($26.80) in advance for each month, or any part thereof.* The license has to be submitted to the police authorities at each place visited. The penalties for any violation of the regulations are very high. A license issued in Sweden is only valid in that country, and one obtained in Norway is only valid there. The customs regulations with regard to samples are similar to those in Germany.

England.—No license is required, nor tax levied. With regard to the reexporting of samples, the formalities are very simple.

Russia.—The license required is based on that issued by the home authorities. The tax collected is from 37 to 39 rubles ($28.56 to $30.10). The customs regulations are similar to those of Germany.

Servia and Roumania.—Subjects of the most-favored states require only the license of their home authorities, but in Roumania business must be done only with taxpaying traders. No tax is levied on the traveler. Customs regulations in regard to samples are the same as in Germany.

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*A report from Consul Monaghan, of Chemnitz, dated May 25, 1897 (printed in CONSULAR REPORTS No. 202, July, 1897, p. 460) says that the legislature at Stockholm has under consideration a bill to reform this evil. It is proposed, when the tax is paid, that the license shall be good for thirty consecutive days, instead of for each calendar month.

Bulgaria.—The same applies to Bulgaria, except that the home license is to be legalized by one of the principal chambers of commerce.

Turkey and Greece.—No special tax is levied either in Turkey or Greece, nor is any license required in the latter country. In both countries, samples of no commercial value are duty free. Other samples are subject to a duty of 8 per cent ad valorem, of which 7 per cent is returned, provided the samples are taken out of the country within six months. In Greece, the duty is returned if the exportation takes place within three months.

Spain.—Spain levies no tax on foreign commercial travelers. Samples remain duty free for one year.

THEODORE M. STEPHAN,
ANNABERG, *May 27, 1897.* *Consul.*

TRUSTS IN AUSTRIA.

I have the honor to inclose herewith a copy of the bill recently introduced in the Reichstag for the supervision of trusts controlling the price of sugar, brandy, beer, oil from minerals, salt, and such articles of consumption as are subjected to an excise.

There is hardly any doubt that other trusts will be put under the same regulations.

It will be observed that trusts in this country meet with nearly as much opposition as they do in the United States.

MAX JUDD,
VIENNA, *June 14, 1897.* *Consul-General.*

THE TRUST BILL.

SECTION 1. Whenever independent enterprises unite themselves for the purpose of influencing the conditions of production, price, and consumption of such articles of consumption which, like sugar, brandy, beer, oil from minerals, and salt, are subject to an excise, such alliances of enterprises (trusts), according to this act, are to be subject to the supervision of the Government.

The same governmental supervision takes place over agreements between two or more home trusts and over agreements between domestic trusts and similar organizations in foreign countries.

SEC. 2. A trust, in order to be valid, requires in all cases a statement, under a notary's acknowledgment, of the following details:

(1) Purpose and object of the trust.

(2) Branch of trade and number of members of the trust; name of each.

(3) Privileges and obligations of the members and contracts or agreements entered into by the members as to penalties, etc.

(4) Seat of the trust (office of the home management), or, should it be a foreign trust, the name of the manager and his place of residence in Austria must be given.

(5) Management and general features of the business done.

(6) Names of the foreign representatives, if there are any.

(7) Duration of the agreement made by the trust members.

(8) Eventual agreement as to the way of settling litigations arising from the trust.

SEC. 3. The provisions of the act of April 7, 1870, section 2 (law of coalition), as far as they concern agreements on prices of wares under section 4 of the same act as to trusts concerned in the proposed act are hereby annulled; the other provisions of the first-mentioned act stand valid.

Any kind of agreements or settlements mentioned, either by statute or by resolution of trusts, are prohibited; any other provisions on associations and unions stand untouched by these presents.

SEC. 4. Notice must be given to the authorities of all statutes of trusts. Within eight days at most subsequent to executing the statutes of trusts, notice is to be given to the Ministry of Finance. The validity of the statute of trusts, or any amendment of the same, especially any calling of sessions of members of trusts, require the authentication of a notary; these facts and also the dissolution of trusts are to be given notice of in the same way.

The notary shall present within eight days the statute, or any modification of it, to the Ministry of Finance in five authenticated copies.

A new trust is not permitted to take action, nor are any of the statutes efficacious, earlier than a fortnight prior to the presenting of the notice.

Any resolution relative to the fixing of prices, quantity of production, etc., are to be notified to the Ministry of Finance not later than one day after formation of the resolution.

SEC. 5. The members of the trusts are obliged to have the notification provided for in section 4 made in person or by a specially empowered attorney or representative.

SEC. 6. The governmental supervision over the trusts mentioned in section 1 is to be managed by the Ministry of Finance.

It is authorized to examine for this purpose any commercial books of the trusts and notes of the business transacted by the same, and to demand from its directors, managers, and the interested enterprises any information respecting any business relation, external or among the members.

The obligation of giving information shall not be extended to any technical contrivances and procedures.

SEC. 7. The Ministry of Finance is authorized to prohibit the execution of resolutions of trusts (mentioned in section 4) if they are apt to cause increase or decrease in prices of goods or services to the injury of the producers or performers (unless the resolutions have for object to effect economy in branches of industry by the establishment of prices and in view of the condition of competition), on account of the damage to the capacity of consumption, to taxation, and to the proceeds of excises which may result from such resolutions. For the said reasons the existence of a trust and any alteration of the statutes can be annulled, if the trust has one of the aforesaid objects. In these cases, the manager of the trust and representatives of the branch of trade are to be heard.

The Ministry of Finance has to decide, after careful examination, whether or not the circumstances are those provided for in the law. A trust trespassing on the provisions of section 3, paragraph 2, is to be annulled by the Ministry of Finance.

SEC. 8. The existence of a trust, any modification of its statutes, or resolution named in the last sentence of section 4 having been annulled by the Ministry of

Finance on the ground of this act (sections 7, 13, and 19), its existence is illegal and the statutes, amendments, or resolutions (section 4) shall be void.

SEC. 9. The Ministry of Finance is authorized to order, at any time, the managers of a trust to give bond, the amount of which is to be fixed in accordance with the extent of trades under the trust, but never exceeding 200,000 florins. This bond is to serve as security for the conformity of the trust to the provision of this act (section 19). The method of giving and depositing the bond will be controlled by special decree.

SEC. 10. A special committee, consisting of twelve members and presided over by the minister himself, or a substitute designated by him, is to be formed in the Ministry of Finance. Of these members, half will be selected by the minister from among officials of the Ministry of Finance and other ministries concerned. The other half are to be selected from the professions to act for a certain period. Tax or excise officers are not allowed to be members of this committee.

Prior to any decision (section 7) prohibiting a trust or a resolution of a trust by the Ministry of Finance, the opinion of the committee is to be heard.

The Ministry of Finance, according to this act, is entitled to confer upon the committee the superintendence of the trusts, above-mentioned decisions excepted.

The Ministry of Finance or the committee in charge is authorized to employ one or more commissioners, designated for special cases or for permanent service, to exercise governmental supervision. They have the authority noted in section 6, paragraph 2, to make the necessary inquiries, and they, too, shall not be selected from among tax officials. Particular provisions as to the selection and the nature of practice of the committee and as to the privileges of the commissioner will be issued by special decree.

SEC. 11. The members of the committee and the commissioner are bound by oath to secrecy, unless they are acting Government officers, who are bound by official oath to keep secret any official business. Duty of secrecy especially involves strict silence as to any object of business or trade.

SEC. 12. This law applies to trusts (section 1) already in existence, and they have to give notice (section 4) within a month from the day they begin work.

SEC. 13. Should one of the notifications provided in sections 4 and 12 be omitted within the fixed period, any manager, member of a trust, legal representative of the companies, or their attorneys shall suffer for such an omission for any special case a disciplinary fine of not exceeding 2,000 florins. In the same manner, the notary is to be fined who omits the performance of duty as provided in section 4.

When the persons aforesaid refuse to give information asked by the Government they shall be punished by a fine up to 1,000 florins. On a repeated refusal, the Ministry of Finance may annul the existence of the trust.

SEC. 14. Whoever gives false or essentially incomplete information on points important for the consideration of the actions of the trust (whether by design or gross carelessness), is guilty of an offense and is to be punished with imprisonment of from eight days to three months and with a fine of from 100 to 5,000 florins.

SEC. 15. Whoever participates in the activity of a trust (section 1) designedly or by gross error—

(1) In spite of the Government's prohibition or prior to expiration of the requisite time provided in section 4;

(2) Whoever carries into effect a resolution of a trust which is prohibited by the Government;

(3) Whoever participates in a trust having taken action (*a*) on the ground of a statute of which the Government has not been notified, (*b*) without considering the provisions of the statute, (*c*) under an agreement of a trust which differs from that contained in the statutes, or (*d*) without any statute;

(4) Who trespasses on the provision of section 3, paragraph 2—
is also guilty of an offense and shall be punished with one to six months' imprisonment and with a fine of from 200 up to 10,000 florins.

SEC. 16. Members of the committee not belonging to the corporation of Government officials having trespassed on the duty of secrecy shall be removed at once from their functions by the Ministry of Finance.

If aggravated circumstances supervene, they are further to be fined up to 1,000 florins. Government officials committing indiscretions in official business are to be punished according to disciplinarian provisions.

SEC. 17. The authorities of the country (magistrates) can inflict the aforesaid fines (sections 13 and 14, paragraph 2), but appeals can be made within two weeks to the Ministry of Finance. The cases are to be tried in the district where the offense has been committed. The disciplinary fines go to the imperial treasury. Offenses named in sections 14 and 15 are submitted to the jurisdiction of the common law courts.

SEC. 18. The manager of a trade is responsible jointly for any disciplinary fine inflicted upon his representative, according to the present law, and likewise for any fine against his attorney, on account of an offense (section 14) committed in presenting the proper notice.

The manager is answerable jointly for the fines for other trespasses, inflicted on the ground of the present act, if the trespass has been committed by his own order, with his knowledge, or if it could have been prevented by his due care and attention. The responsible person is to be summoned to the civil law court.

SEC. 19. The bond given by the managment of the trust is held as security for all disciplinary or other fines inflicted from the time of the deposit of the bond against any manager, member, or representative. The Government has first claim on the bond for fines.

In the cases of section 15, paragraphs (1) and (2), the Minister of Finance, after having heard the committee (section 10), is authorized to declare the bond forfeited in whole or in part.

The bonds forfeited go to the imperial treasury, unless the bond has been deposited a fortnight after the order of the Ministry of Finance was issued, or has been supplied to the full amount after the forfeiture. The Ministry of Finance shall be authorized to prohibit the existence of the trust or to cause the missing amount of the bond to be collected.

SEC. 20. The Ministers of Finance, of Interior, of Justice, and of Commerce and Agriculture are ordered to carry this act into effect, which becomes valid with the day of its publication.

PRODUCE EXCHANGES IN GERMANY.

At the beginning of the present year I had the honor to report* to the Department of State the curious situation in which members of the produce exchanges in Prussia found themselves, owing to the endeavor of the landowning class to force upon the governing bodies of these exchanges a number of directors appointed by the Minister of Industries and Commerce, but not elected by the produce brokers themselves, as the directors have been chosen hitherto. Rather than submit to the new regulations in this respect, the grain men of

* Published in CONSULAR REPORTS No. 198 (March, 1897), p. 397.

Berlin left their official quarters in the general bourse and, announcing that they no longer constituted a bourse, met thereafter informally in a hall hired for the purpose.

The Agrarian journals demanded that this informal meeting should be considered an exchange, and that the members should be governed by the rules relating to exchanges—that is to say, that they must pay the tax on business transactions, they must accept the supervision of the commissaries appointed without their consent, and they must not indulge in "futures," or, in fact, any business which is not based on an actual tranfer of actual goods. I remarked at the time that the powerful social and political forces of the Agrarians would make the combat too unequal, and the brokers would have to go to the wall.

I have now to report that, by order of the chief of police of Berlin, the meetings of the produce men have been declared illegal. If in our land such orders excite surprise, it does not astonish any one here, where a policeman can declare any meeting at an end on the most frivolous pretext, if it excites the suspicion of the authorities. Last winter a policeman in Saxony dissolved a meeting to discuss matters of public interest because his feet were cold. Lately, in Prussia, another put a summary end to a conference because he found the room too hot for his personal comfort. It is natural, then, that the papers which most severely criticise the action of the Government as regards the closing of the produce exchange and the persecution of the brokers never express surprise; they merely strive to point out the probable harm that will ensue.

It was supposed until recently that some compromise was about to be effected between the agriculturists and the brokers. It was said that the former had waived the right to have leading Agrarians appointed on the governing boards. There is strong probability that this was the case; the sudden move of the chief of police seems to have been the result of pressure brought to bear from quarters where a compromise of that sort, or, indeed, of any sort, is not desired. The brokers must submit or their livelihood is to be stopped.

Since the brokers were driven from the official bourse, quotations have been uncertain and hard to obtain, but the season is not like midsummer, when the small farmer wishes to know at what prices Berlin is buying and selling grain, in order that he may not be overreached by the local purchaser. But since the last ukase, even these uncertain price lists are in default. The grain growers are looking forward with anxiety to the approaching harvest; there seems no method by which quotations can be collected. Radical Agrarians waver between the idea of sending policemen to the several offices of the grain brokers and haling them to the produce exchange and

the suggestion that "other" merchants be asked to constitute themselves grain sellers. The ease with which this political party of Prussia can have laws passed and the police interfere in matters that concern their pockets springs from the fact that the great majority of high offices in the State, army, and police and other departments are in the hands of members of the aristocracy.

To give an idea of their methods, I can point to the Kreuz Zeitung, one of their organs. It has printed a statement that lately medical men had urged the publication of several recent cases of severe colic, which can clearly be traced to the eating of American sliced apples. These apples are said to be dried on zinc in order to give them a finer color and to preserve them better. While their paid "experts" write articles in the papers casting doubt on the thoroughness of meat inspection in the United States, their leaders in the Prussian Diet ask that meat inspection be stopped everywhere except at the frontiers—that is to say, that there shall be none for native meat. This is all the more remarkable, because statistics show a great increase in tuberculosis among native swine, attributed to feeding them with the refuse from the modern general dairies. To prevent the spread of the disease, it was proposed to have all refuse at these dairies submitted to a heat of 85° Celsius and certain other protective measures enforced. But this did not suit the Agrarians, because it meant greater costs of production. The measure has not been accepted. This recalls Graf von Arnim's proposition in 1896 that all foreign grain should be quarantined for three months, because it contained bacteria hurtful to the health.

The probable result of measures of intimidation against the produce exchanges will be to disorganize prices at the approaching harvest, with consequent loss to the small farmer, who can not watch the market through foreign papers. It has already entailed much loss to the treasury, because the exchange taxes are not collected. It may further cause the emigration from Berlin of the grain market.

Meantime the constant ventilation of the subject in the press has brought out several points interesting to Americans. One is that German grain does not keep well because of its softness and the amount of moisture it contains; another is that the millers must have foreign grain mixed with the German in order to get good bread; a third is the general belief that Germany can not supply her present population with breadstuffs, even if by quarantines and protective duties the Agrarians manage to make their own grain dearer. Owing to these and other reasons, I think American corn meal, oats, and wheat will have a better market this summer in Germany than ever before.

CHARLES DE KAY,
Consul-General.

BERLIN, *June 17, 1897.*

REGISTRATION AND COLLECTION LAWS IN SWITZERLAND.

The wish having been expressed by some of the American mercantile associations interested in exports that information might be placed at their disposal regarding such matters as the collection of debts in foreign countries, the recording of mortgages, the dissolution of partnerships, etc., I have obtained from the United States consuls located in the three leading cities in Switzerland the reports which appear below, and which, it is hoped, may to some extent meet the requirements of American houses doing an export business in Switzerland.

IRVING B. RICHMAN,
Consul-General.

ST GALL, *June 15, 1897.*

GENEVA.

[Benjamin H. Ridgely, consul.]

Mortgage deeds must be drawn up by a notary and registered for the payment of the fiscal duty and recorded at the bureau of mortgages.

Sales can be drawn up by private deed or by notary. Sales of real estate are required to be drawn up by a notary and registered.

Receiverships are ruled all over Switzerland by the federal law of April 11, 1889, on "prosecutions and failures." In each arrondissement, or district, of Switzerland there is an office des poursuites (prosecutions) and an office des faillites (failures). Each office has a director, and the director of the office des faillites is de facto the legal receiver for his district. Under certain special circumstances, a liquidation can be made by common consent of all interested creditors without the intervention of the authority called office des faillites.

Dissolutions or changes of partnership can be done either amicably, by private deed, or by notary, or, if parties do not agree, by applying to the courts. They must be inscribed at the register of commerce of the district if they are incorporated companies.

For records of mortgages or deeds of sale, it is necessary to apply to the notary or to the custodian of mortgages. For records of dissolutions or changes of partnerships, one may apply to the parties, to the notary, or, better still, to the director of the register of commerce of the district; for receivership records, to the director of the office des faillites for the district. Charges vary according to the importance of the matter investigated.

In this canton, the office des faillites advertises the business failures in the Feuille des Avis Officiels.

There is in Geneva a Union pour la Sauvegarde des Crédits, in the Place du Molard. The method of procedure is, I am told, the same as at Basel, where the system exists in its perfection.

The mode of proceeding of this company is set forth in its constitution as follows:

(1) To protect its members from bad credits by furnishing them with the most accurate information and references possible.

(2) To reform all abuses of credit.

(3) To recover doubtful accounts by moral pressure, and, if necessary, by judicial proceedings on behalf of the member and at his expense.

An entrance fee of 5 francs is charged, and the annual subscription is 15 francs, payable in advance.

The association is managed by a committee of nine members, who are elected in general assembly of the company for a term of three years, the services of these members being rendered gratuitously. This committee meets once a month.

Each member receives gratis all verbal information and references he may desire in town, and has a right, besides, to thirty written references per year on parties in town. Beyond this number, and for all references elsewhere, the ordinary tariff rates are charged him.

For accounts to be recovered amicably, a first letter is sent to the debtor requesting him to pay the amount in question; then, in a fortnight, a second letter is sent him by registered post. Should the debtor still persist in not complying with the demand, or does not furnish a valid excuse for not doing so, he is thereafter considered as being incapable of fulfilling his business engagements, and his name is recorded on a list of bad payers drawn up by the committee, which list is always kept at the disposal of any of the members.

On receipt of a formal written order from the creditor (or, in cases of urgency, one from the bureau itself, should the latter deem it urgent in the interests of the member to do so of its own accord), the association institutes judicial proceedings, and, as the authorized agent of the creditor, fulfills all the preliminary formalities at the office des poursuites. Should the debtor oppose, the association requests the creditor to give a new letter of attorney to act in the matter, and then proceeds to engage the services of a lawyer and to institute the prosecution. The creditor, who must be a member, is responsible for all wrong information or mistakes, he undertaking, moreover, to pay all the expenses and charges indicated in the tariff, whatever may be the result obtained, as well as all fees incurred and money advanced on his behalf by the bureau. Any member convicted of having knowingly furnished false information, or having put false accounts not due into the hands of the association for recovery, is liable to be expelled by the committee.

Each member is exonerated from any individual responsibility for the engagements of the association.

There are no such commercial agencies here as Dun's or Bradstreet's, but there are individuals who, for a small fee, will undertake to furnish information as to commercial standing, credits, etc. It is the habit, however, of merchants and others who desire to know to what extent credit may be given to any individual or company to address themselves to their bankers, who are prompt, reliable, and

thorough in furnishing the desired information. I would, for example, advise any American firms desirous of knowing the commercial standing of anybody in Geneva or in the territory adjacent thereto to address Messrs. J. T. Bates & Co., American bankers, No. 10 Rue Petitot, Geneva.

BASEL.

[George Gifford, consul.]

Mortgages are recorded in the Grundbuch, or registry of deeds, a bureau of the Department of Justice. The officer in charge is styled the "Grundbuchverwalter," assisted by a deputy and surveyor (Grundbuchgeometer). These officers permit an examination of the records only when the person applying to them for information can show that he has an interest in obtaining it.

Bills of sale of personal property are registered at the clerk's office of the civil court. The Gerichtsschreiber (clerk of courts) is the custodian of these records.

Partnerships, dissolutions, and changes in partnerships are recorded primarily in the cantonal commercial register (Handelsregister) by the Registerführer, an official of the Department of Commerce. All these entries are subsequently printed in the Cantonsblatt, the official journal of Basel, and in the Handelsamtsblatt, or official organ of the federal Department of Commerce in Berne.

Lists of business failures.—Business failures are officially recorded by the same authorities as the partnerships and printed in the same journals. The Cantonsblatt appears every week; the Handelsamtsblatt daily.

Protective and credit societies.—Not known in this district.

Commercial reports.—There are no commercial reports like Dun's or Bradstreet's.

Registration fees.—For recording mortgages and similar instruments in the Grundbuch, or registry of deeds, of this canton, the following are the legal charges:

Value.	Fee.	
	Francs.	
1,000 francs ($193)	1.00	$0.19
1,000 to 5,000 francs ($965)	2.50	.48
5,000 to 10,000 francs ($1,930)	5.00	.96
10,000 to 20,000 francs ($3,860)	10.00	1.93
Over 20,000 francs	15.00	2.89

For recording satisfaction or payment toward mortgage debt, change of debtor or creditor, and caveats, the legal fee is 1.50 francs up to a value of 5,000 francs; above that sum, 2.50 francs.

ZURICH.

[Eugene Germain, consul.]

The recording of mortgages, bills of sale, deeds, etc., is done through the notary public in whose district the property to be recorded is located. The notary is a public officer, elected by the people for a period of from three to six years. He gives a bond, varying in amount according to district, and the cantonal government becomes responsible for his official acts. The cantons are divided into notarial districts, apportioned in cities and country according to population. For instance, the city of Zurich has seven notarial districts; hence seven notaries. The notary is the custodian of the real estate records of his district, and is also the officer to whom application for voluntary or involuntary bankruptcy must be made, and in conjunction with the Betreibungsbeamte, he is the officer through whom suits are brought to recover debts. He administers, disposes of, and settles insolvent estates under the supervision of the district court.*

Receivers are appointed for corporations only by the competent court, upon resolutions adopted by the majority at a duly authorized creditors' meeting. Stockholders of joint-stock companies, where the full amount of stock called for is paid up, are not further liable to creditors, but where stock is only partly paid in, stockholders are liable for the unpaid part of their respective holdings.

Regarding the registration of firms, corporations, etc., the statutes of Switzerland provide for a federal register of commerce covering the whole of the Swiss territory. This branch of the Federal Government has its headquarters at Berne, with district registry offices apportioned over the entire country. The registry is obligatory.

New firms and corporations commencing business, dissolutions of partnerships, discontinuances by death or otherwise, etc., must be registered at the office of the district in which the principal place of business of the firm or corporation is located. These registrations are published by the federal registry bureau at Berne in the official Journal of Commerce, a paper issued three times or more a week. This paper has a large circulation among merchants, the subscription price being low.

In registering, a firm must state the amount of capital invested by the silent partners, if any, the names of all the partners and silent partners, and corporations must state the amount of the capital

*The "Gemeindeammann" (who is at the same time "Betreibungsbeamte") performs part of the functions of our sheriff and constable, such as levying on property, serving writs of attachment, serving summonses, etc., but there his authority ends; he can not make arrests, etc.

stock. The special partners do not become responsible for any indebtedness of the firm except to the amount of capital contributed, and have no voice in the management of the concern. Corporations must state the amount of nominal capital stock, amount actually paid in, and names of directors; they must produce at the same time a copy of their by-laws—all of which is published in the above-named Journal of Commerce, as well as the names of parties holding sole or joint power of attorney for a firm or corporation. This journal is almost identical with the daily notification sheets issued by our mercantile agencies of Dun, Bradstreet, and others, with the exception that it is official. The real estate transactions and records of mortgages are not made public in Switzerland, but can be ascertained by examination of the public records in the hands of notaries.

The assessment rolls open for inspection will show what real estate a man owns, as well as the encumbrances thereon. The mercantile agencies in this district will make such searches, charging from 1.50 to 5 francs (28 to 96 cents) per inquiry. To regular subscribers, the charges are about 25 per cent less.

Mercantile agencies, or information bureaus, as they are called here, issue no books of rating or notification sheets. They only furnish information upon each application. No creditor can take advantage of another in Switzerland. If a firm or corporation fails, the authorities take charge of the assets, wind them up, and all creditors share alike in the final distribution.

If the creditors agree to a settlement, upon their request the property of the debtor is released and returned to him after the settlement has been satisfactorily consummated. The charges for levying upon, administering, disposing of, and winding up an insolvent's property are established by law, and are very light in Switzerland; in fact, the authorities claim that they are too low for present requirements. I name a few of these to give an idea of what it costs to recover indebtedness:

Tariff of charges for prosecuting debtors.

To register and issue, in duplicate, a summons demanding payment:	
Up to 100 francs ($19.30)	$0.30
Over 100 francs	.50
If more than two summonses issue, for each additional service	.10
Service of summons:	
Up to 100 francs	.30
Over 100 francs	.50
Returns of collections made from debtor:	
Up to 100 francs	.30
Over 100 francs and up to 1,000 francs ($193)	.50
Over 1,000 francs, one-half of 1 per cent.	

Execution and issuing writ of attachment or garnishment:	
Up to 100 francs	$0.19
Over 100 francs	.38
If the execution requires more than an hour, for each additional half hour	.50
For taking inventory, appraising, closing and sealing up premises, where not over an hour's time is required	.38
If over an hour, for each additional half hour	.10

AMERICAN PETROLEUM IN GERMANY.

Believing it to be of interest to our petroleum producers at home, and, perhaps, not inopportune at a time when the international press is continually reporting that the German Government is likely to adopt measures to exclude American petroleum in retaliation for tariff legislation in the United States, I would beg to call attention to the following article, which appeared in the Hamburgische Börsenhalle of March 18 last. This article reads:

The report of the Sächsisch-Thüringsche Actiengesellschaft für Braunkohlenverwerthung gives very interesting information as to conditions existing in the petroleum trade. It says, among other things:

In the same way that the introduction of American petroleum has caused a decrease in the consumption of our solar oil, so the Standard Oil Company in New York is endeavoring, through its German commission men, to make paraffin (which is one of the kindred products of petroleum refining) more and more popular in the inland candle factories. They have been partially successful, through repeated cuts in prices; so that the existing customs duty of 10 marks per 100 kilograms ($2.38 per 220 pounds) no longer offers any protection. Even if the contemporaneous fall in tallow and stearin prices, which continued during the whole year, affords an explanation of this decline in value of foreign paraffin, there is no doubt that the action of the Americans is based upon the intention of systematically getting possession of the German market for this residual product of petroleum. All the more does the German Government deserve credit for its cautious treatment of motions which, emanating from interested sources, look to differential duties in favor of raw petroleum, under the pretext of preventing a monopoly of the trade in Germany. The effect of such a tariff reduction would have been the manufacture, almost free of duty, of American paraffin within the limits of the German customs territory. The substitute which the federal council has found (the issue of differential decrees, permitting the entry, duty free, under special control, of raw petroleum which is intended to be refined in inland refineries, but placing full duties upon the completed manufactures from said oil) must be regarded as a considerate and praiseworthy concession to our industry.

The report devotes the following remarks to the petroleum industry:

The investigation made in the beginning of the year by the Department of the Interior, with the assistance of experts, of the causes for the rapid rise in prices in the year 1895, which was supposed to be due to manipulations on the part of the Standard Oil Company, showed a negative result. To be sure, the desire of this company to get as much of the German petroleum business into its hands as possible was nowhere denied; the monopoly, however, could only have been gained through low, and not through high, prices; and it was impossible to draw the conclusion that the sudden rise in price of petroleum had emanated from that quarter.

Two practical measures were proposed against the monopoly, viz, first, the strengthening of the German importers, who had thus far remained independent of the Standard Oil Company, and, second, the facilitation of the entry of Russian and Galician illuminating oils. The former, for instance, would have been possible, if the examinations of quality, which were made at the same time, had shown that the illuminating oil of the Standard Oil Company, especially of Lima and Ohio oil, was inferior or dangerous, as had been claimed. The official investigation, however, did not show any such deficiencies. On the other hand, and in order to aid the importation of petroleum from Russia and Austria, two countries with which we are on friendly terms, the introduction of a differential duty in favor of oil for refining purposes—an industry which it was intended to domesticate in Germany—was recommended. The Government did not agree to this; but at the close of the year exceptional decrees were issued admitting raw oils free from all producing countries, with the proviso that the refining process be controlled. The result of these new decrees must be awaited. America would hardly be considered as a shipper of raw oil, as the Standard Oil Company, for potent reasons, will not be inclined to ship, and the other American producers are controlled by this company. Galicia is the nearest producing center, but opinions differ as to whether the producers there will be able and willing to deliver the oil so cheaply that the refining of the same in Germany would pay. The rise in price of Galician oil, which has occurred in the meantime, would not appear to indicate that they will.

This article, even for one well posted on all matters connected with the petroleum trade, is not quite clear in its references to a number of circumstances and conditions. I deem it proper to add a few remarks in explanation. In the first place, it is necessary to mention that the Sächsisch-Thüringsche Actiengesellschaft für Braunkohlenverwerthung is a stock company, which manufactures from lignite, or brown coal, among other articles, an illuminating oil, called solar oil, and paraffin scales. The above extracts (which are taken from the company's annual report to its stockholders for the business year ended December 31, 1896) would seem to indicate that the managers, after an unfavorable year, desired to comfort the stockholders by painting the outlook for the future in as glowing colors as possible. They begin by admitting that the Standard Oil Company of New York is not only responsible for a continued decrease in the sale of their solar oil, but has also, through repeated cuts in prices, and notwithstanding the comparatively high duty of $2.38 per 220 pounds, become a dangerous competitor for their paraffin scales. Their business in these scales would have been further destroyed had the Government allowed all raw oil to come in free of duty. As it is, refined oil pays a duty of about $1.43 per 220 pounds here, while oil that is to be refined in Germany pays no duty; but kindred products, such as paraffin, are taxed just as though they had been imported from abroad. Otherwise, the competitors of the tar oil and paraffin people could manufacture an article from American raw petroleum duty free, and thus make the protection that was intended by the duty of $2.38 on foreign paraffin of no avail. It was thought

that, by admitting raw oil free for refining purposes, a new industry would be created in Germany, and that it would be better to let Russia and Galicia use this new market to drive out the Standard Oil Company. While German refineries were to keep out the American refined oil, the differential duties in favor of Russia and Galicia were to keep out the American raw oil. It is needless to speculate as to why the German Government refused to thus add to its discriminations against our products. Suffice it to say that the scheme was simply impracticable, owing to the inferior quality of the Russian and Galician oils, as well as to the fact that they can not be delivered here at American prices. It was found impossible to create refineries for either European or American oils. The Americans naturally declined to destroy their own refineries by furnishing the crude article to those here, and it could not be procured elsewhere. As a matter of fact, there are no refineries of petroleum in Germany, with an unimportant exception in Bremen and some few refineries of German petroleum in Alsace-Lorraine. Very little raw oil comes from the United States, Russia, or Galicia.

The report makes the very important admissions that the Standard Oil Company was not responsible for the rapid rise in prices of oil in 1895 and that the severest official tests have failed to find anything dangerous in even the worst qualities of their refined petroleum. It further concedes that efforts were made to discriminate in favor of Russian and Galician oils against American, on the ground that they were "two countries with which we are on friendly terms"—a rather significant assertion just at present, and one which would, no doubt, interest our legislators.

I have talked over the general situation with one of the largest Hamburg oil merchants, who, though on intimate terms with the Standard Oil people, is entirely independent of them. It was interesting to learn that, in his opinion, it was utterly useless for the German Government to attempt the exclusion of American petroleum from Germany through legislative measures or otherwise. According to him, any action of the Germans could be met by the Standard Oil Company, which is fortunate enough to practically possess the monopoly of both the crude and the refined article. In support of his opinion, he cited the action of the Standard Oil Company in France. There, the duty on refined oil is double what it is on the crude article. When this tariff went into effect, large refineries were started in France which began importing their raw oil from America. This oil, however, was not purchased from the Standard Oil Company, but from its competitors. The Standard Oil Company, after making a few futile efforts to crowd out this competition, submitted an ultimatum to the French refiners, to the effect that it would at once open sev-

eral very large refineries of its own in France if the French would not bind themselves to buy their crude oil from the company. This had the desired effect. He also mentioned that the Russians have on hand a stock of over 1,000,000 barrels, which they have been trying in vain to reduce, and that when efforts were made some time ago by German dealers in Russian petroleum to undersell the American article in certain districts of southeastern Germany, the Standard Oil Company established in these localities retail dealers, to whom it furnished petroleum at such low figures that they soon drove out this competition. It would, however, in his opinion, never have become a very dangerous one, for the following reason: It appears that the Russian petroleum can not compare in its illuminating power with our product, and that, even if it is burned in lamps specially constructed for its use, it produces a stench not characteristic of American oil. This is due to the fact that the Russian article requires as pure air as possible—an air that must contain a certain amount of oxygen—which it finds in Norway, Sweden, Switzerland, and other mountainous countries, where it consequently sells well. In order to be able to use it in Germany, nearly all the lamps in that country would have to be supplied with new burners, and, as even the very poorest classes employ petroleum for lighting and cooking purposes to a very considerable extent, this fact in itself would seem to be a remarkably good protection for American oil. In Galicia, the oil wells possess such a low pressure that it is necessary, I am informed, to pump the oil, which naturally adds to the cost of production.

My informant also seemed to think that if refineries of any importance should be established in the future in Germany, the Standard Oil Company would be likely to repeat the tactics employed in France. In fact, he believes that this concern has not only determined to hold the ground it has gained throughout Europe, but that it will continue to use its best efforts to increase the scope of its operations, and that it does not fear threatened legislation of an exclusive or retaliatory nature, either by Germany or other countries.

A close study of this question inclines me to believe that he is right, and that the facts above referred to are good illustrations of the futility of trying to force trade into unnatural channels by artificial pressure or restrictions.

W. HENRY ROBERTSON,

HAMBURG, *June 3, 1897.* *Consul.*

THE OUTLOOK FOR GERMAN TEXTILES.

The Confectionair, Berlin's best and widest known textile journal, published interviews a few days ago with leading manufacturers of this city. The subjects covered were hosiery, gloves, and upholstery goods. Inasmuch as Chemnitz is the most important market and manufacturing center for hosiery on earth, it may be of interest and profit to our manufacturers to know just what German manufacturers think. The man interviewed (Director Wiede) is one of the partners in the largest house here, that of Moritz Sml. Esche. His words are very important.

Mr. Wiede says nothing can take the place of the export business now and for many years carried on with the United States. "Other territory for our hosiery is not worth the time taken to talk about it." Speaking of the new tariff bill, Mr. Weide said some one in the Reichstag recently went out of his way to say that America would ultimately collect as high as 60 per cent on imports. "One hundred and twenty per cent will be paid now," said Mr. Weide, "on certain goods made here. For the last four weeks no orders to speak of have been booked. Every thinking manufacturer is curtailing his production. For over three hundred and sixty-six days machines in many of the very best factories have been idle. There are, however, manufacturers who produce millions of dozens, pile up stock, and afterwards bear down on the market so heavily as to injure, if they do not destroy, all legitimate trade. Cheap sales, fall in prices, and reduced wages are the consequences. The Chemnitz manufacturers of hosiery sell to the whole world. They have now no important competitors. England, it is true, makes something similar to Chemnitz goods in Nottingham, and Apollda goods in Leicester. Still, the only place to be spoken of to-day as a hosiery center is Chemnitz.

"American buyers formerly went to Nottingham, staying four or five weeks, and came to Chemnitz for eight days; now, they spend four or five weeks here and do not go to England at all. The English hosiery trade may be regarded as beaten out of the world's markets by the German. The principal factors in the battle were cheaper goods, easier terms, better delivery, and greater desire and willingness to do what was wanted. Manufacturers like Morley still make hose in large quantities, selling them even here in Germany, *i. e.*, the better grades; this because there is a prejudice against German goods. The Americans are practical people; they have long since found out the facts. Our production has been reduced; a large number of machines are idle, the rest run only four days in the week.

We could easily make five times as many as we turn off now. The prospects are far from encouraging. The only thing that can help the hosiery trade here is to secure trade treaties based on reason. I believe that the Americans have been approached on the matter; but the thing must be pressed with more energy by the Government. It is a well-known fact that rings of interested parties are organized who cause the tariffs to be increased by means of money and influence. A tariff war must not be begun. America is making every effort to emancipate itself, little by little, from Germany. We will make it hard for them to get along without us. They will not find it so easy to throw us out; still, in time, it will be possible. Here, now, we earn so little, we would do better to close the factories. The idea of erecting factories in the United States has been considered. We would do it at once, were we sure that the duties would be kept up; that, however, no man can predict. For ten years, fashion has asked for blacks. In the last two or three years, tans have gone in large quantities; and very recently, some fancies in which Germany excels. We are making now many colored, checkered, silk stockings exactly like the Scotch samples. We have become so skillful that we can imitate any sample, and we can overcome every technical difficulty. All this aids us in holding our position.

"One evil against which Chemnitz has long contended is its miserable railroad connections. We want better, closer, and in every way quicker relations with Hamburg and Bremen. This is very necessary. Above and beyond all, however, it will aid us to get good commercial treaties with North and South America. There is not a workman in Saxony who does not detest the protective-tariff system of the United States. Most of our help have to look for work now in other branches. By and by, when business will be better, as we hope, it will be hard to find as good help as we now have to part with."

The interview with Mr. Gulden, Chemnitz's leading glove man, and with Mr. Carl Durfeld, one of the leading manufacturers of upholstery goods, were so similar in tone and temper to the one recorded that I did not deem it necessary to report them. Both laid particular stress on the importance of our markets for German manufacturers, and, especially, for those in this consular district. The manufacturers believe they can beat ours in the end. They boast that no tariff would be high enough to keep them out if we would not change. They say: "Set the rates, stick to them, and we will climb over them with new machines and new conditions."

J. C. MONAGHAN,

CHEMNITZ, *June 18, 1897.* *Consul.*

FORESTRY IN WÜRTEMBERG.

STATE FORESTS.

The aggregate extent of State forests is 418,904 acres.

Geographical locality of main body.—The State forests extend over the entire Kingdom. This is situated between 25° 52′ 20″ and 28° 9′ 36″ east longitude (from Ferro) and between 47° 34′ 48″ and 49° 35′ 17″ north latitude. Height above the sea, between 1,150 meters (3,773 feet) and 135 meters (426 feet); medium, 500 meters (1,640 feet); annual quantity of rainfall, 600 millimeters (23.64 inches); temperature (at the capital, Stuttgart), between 3° and 90° F.; average, 50°.

Prevailing kinds of trees.

	Per cent.
Pines, exclusively *Abies excelsa*, D. C.	28.2
White pines, exclusively *Abies alba*, Mill	9.1
Pitch pines, exclusively *Pinus silvestris* and *Carpinus betulius*	20.6
Oak, exclusively *Quercus sessiliflora* and *Qu. pedumculata*	0.8
Other kinds	0.1
Pines, mixed	14.3
Pine and leaf wood, mixed	9.7
Leaf wood, without oak	2.3
Leaf and oak, mixed	7.6

Average estimated value per acre.—The value of the soil varies from $28.90 to $57.80 per acre.

Annual aggregate expense of administration.—Officials, $259,468; forest guards, $138,468; culture, $90,440; roads, $147,560; cutting, $364,140; all other, $183,498; total, $1,183,574.

Area annually sown and planted to forest.—Sown, 296.52 acres; planted, 6,177.50 acres. As far as the natural falling of seed from standing trees occurs in proper time and of the desired kind, the same is used, otherwise artificial sowing or planting takes place. The natural falling of seed is estimated at about 25 per cent, and artificial sowing and planting at about 75 per cent. Reculture is almost exclusively done by planting. Sowing in free woodland is very seldom resorted to.

As far as the age of the crops in the various sections of the forest districts permit, it is a principle to maintain an equal annual cutting. At present the cutting is limited to 910,000 cubic meters (32,347,770 cubic feet), being equal to 68.87 cubic feet per acre.

The cutting is contracted with laborers living in the neighborhood of the forests.

By the usual culture the trees of a given block are generally of the same age. If it is intended to use the natural falling of seed

for restocking, the strongest trees, either single or in groups, are cut out in the direction against the prevailing winds; the remaining trees are thinned and gradually cut out as the growing young trees may demand.

If natural seed falling is not considered, the wood crop is cut clean in narrow strips, also in the direction against the prevailing winds. The cutting of the second and following strips is postponed until the growing young plants can dispense with the protection of the old woods.

It is a principle of the direction of the State forests that replanting follows immediately as cutting progresses. Moreover, the Government buys every year about 160 hectares (395.36 acres) of woodland to increase and round off the estate of forests.

The damage annually caused by fire is estimated at $642.60. The principal cause or causes of such fires are carelessness while smoking and lighting fires in or near the forests. In the last ten years, there were, of a total of one hundred and twenty fires, only eight caused by sparks from locomotives, and among these only one causing considerable damage ($3,570).

All civil service officials are divided into different ranks. The forest service ranks, in general, equal to the other civil service graduates of the university.

The department of forestry is directed by a president and a board of four technical and four administrative officers, with the title of "Forstrath" and "Collegialrath," and one commander of the guards. The salary of the president is $1,844.50; of the other directors, from $1,190 to $1,618.40 each.

The principal annual published report made on the administration of the forests is the Forststatistische Mittheilungen aus Würtemberg für das Jahr 1894 (the latest), published by the royal direction of forestry. It is the thirteenth annual report, and is not for sale.

The best forest periodical is Die forstlichen Verhaltnisse Würtembergs, Stuttgart, Riegerische Verlags Buchhandlung, 1880.

In regard to net revenue, Saxony and Würtemberg stand at the head of forest administration and culture.

PRIVATE FORESTS.

Aggregate extent, 528,794 acres, of which 210,000 acres are managed by technical forest officials and the remainder by private individuals, but in a proper manner.

The average value per acre and the average annual rate of percentage of net income can not be answered by the Government.

As the permission of the Government is required for cutting private forests, and as this permission is only given under the condition

that an area equal to that cut is replanted, the entire area of private forest land remains the same throughout the country, but a part thereof is gradually coming into possession of the Government.

WM. HAHN,
Vice and Deputy Consul.

STUTTGART, *February 13, 1897.*

WÜRTEMBERG VINEYARDS.

A meeting has just been held in this city of the Würtemberg Vineyard Society. From the report made at this meeting I take the following:

In regard to the profit from the culture of the vine, the year 1896 can be considered satisfactory. If the quality was not quite up to our wishes, the year was not without its encouraging side. The quantity was considerably (about 17 per cent) above the average for seventy years, and the autumn sales, which are so very important for us, have proved, contrary to all expectations, quite favorable, both as to price and quantity sold.

The spring of 1896 was propitious; the summer, however, brought thunder showers, with severe and lasting cool periods. In the second half of October, better weather set in, which, in connection with the circumstance that the vines, through careful spraying, had retained their leaves, favored the ripening of the grapes.

According to the publications of the statistical bureau, the entire crop from 17,002 hectares (42,002 acres), amounted to 427,300 hectoliters (11,287,984 gallons), averaging 25.13 hectoliters (663.36 gallons) per hectare (2.471 acres), against 19.61 hectoliters, (518.05 gallons) in 1895. The average product during the preceding period of sixty-nine years (from 1827 to 1895) was 21.6 hectoliters (570.6 gallons), or 16.3 per cent less than the average product of last year.

The average price realized was ascertained to be 24.42 marks per hectoliter (21 cents per gallon), against 56.09 marks (50.53 cents per gallon) in 1895, and 23.21 marks (20.9 cents per gallon) in 1894, almost equaling the average price of the preceding period from 1827 to 1895 of 23.07 marks per hectoliter (20.78 cents per gallon).

The money value of the entire product of last year is calculated to amount to 10,382,256 marks ($2,470,977), against 18,654,152 marks ($4,439,688) in 1895 and 8,057,070 marks ($1,917,583) in 1894, approximating an average of 9,000,000 marks ($2,142,000) during the years 1827 to 1895. For the year 1897, the vines justify the best hopes; the buds are in general so plentiful that, with favorable blossoming and warm, summer weather, a good vintage can be expected.

Of diseases of the vine in the past year we have to mention the peronospora, the so-called leather berry disease, and the so-called soot dew.

The import of wine and grapes from foreign countries during 1896 was not very large and aggregated one-fourteenth part of the home production.

A long debate ensued about the usefulness of applying the pulverized mixture of vitriol of copper, with sugar and burnt lime, which has lately been offered for the prevention of the peronospora. This new remedy is said to have, beyond doubt, the same effect as the remedy which has previously been in use, but to have the advantage,

in consequence of the solution of sugar, of being more adhesive; but it is said to be materially higher in price.

After lengthy discussion on both sides, the presiding officer announced a considerable majority for retaining the old, approved remedy—the solution of vitriol of copper—which, he added, should not exclude experiments with the addition of sugar.

Baron von Gaisberg then opened an interesting discussion upon the question of wine-producing experimental stations in Würtemberg. Referring to the favorable influence of farming experimental stations, the speaker especially commended them in the production of wine. Every wine-growing country, he said, had already established one or more such stations, and Würtemberg, where the people had their money so largely invested in vineyards, ought to be able to offer means to assist vine growing in this manner. Investigations of the soil, its productiveness, the flavor of the various kinds of grapes, as well as other experiments, would largely contribute to the improvement of vine growing. The education of persons for the special purpose of combatting the phylloxera would also have to be one of the problems of such experimental stations, and most of the vine growers would acknowledge the necessity and urgency of their establishment. A bill brought before Parliament by himself (the speaker) for this purpose had been passed by the lower house, but the upper house had not yet acted upon it. As the matter had now passed the first steps, he thought it would be proper for the Würtemberg Vineyard Society to approach the Government with a petition to establish as soon as possible such an experimental station.

In the succeeding discussion, every speaker assented to this motion. The opinion was expressed, however, that the experimental station should not confine itself to purely scientific questions, but should be in constant touch with the vine-growing population of the country. By an unanimously adopted resolution, the assembly addressed a petition to the Government praying for the establishing of an experimental station in the town of Weinsberg at the earliest possible moment.

ALFRED C. JOHNSON,

STUTTGART, *June 18, 1897.* *Consul.*

THE HAMBURG-AMERICAN LINE IN 1896.

This consulate has recently received a copy of the annual report of the Hamburg-American Steamship Company for 1896, which covers the company's fiftieth year of business. The report is one of unusual interest in many directions. It shows, in the first place, a

substantial dividend for the stockholders in spite of the general complaint of trade depression and of reduced emigration to the United States. It points with legitimate pride to the fact that its managers have had the foresight and courage to abandon the time-honored idea that a profitable steerage-passenger traffic was a sine qua non to a transatlantic company's success, and it claims that the results, so far, have fully justified the experiment.

The situation was simply this: The older vessels of the fleet had been built with a view to an ever-increasing emigration to the United States, without which they could not be made to pay, on account of their large consumption of coal and small freight capacity. The question of freight earnings had been subordinated to the one of steerage-passenger earnings. Through various circumstances, however, emigration to the United States from Hamburg has greatly fallen off in the last few years. An interchange of the products of the two countries is, however, a mutual necessity, and it was not very difficult for the company to see the advantage of disposing of its older and smaller ships and using vessels that would consume a minimum quantity of coal and carry a maximum quantity of freight. The older class of vessels consumed, on an average, 60 tons of coal per day, giving the vessel an average speed of 13 knots, and had an average freight-carrying capacity of only 4,200 tons. In 1894, the five "P" ships (*Phœnicia*, *Persia*, *Prussia*, *Patria*, and *Palatia*) were built, with a carrying capacity of 7,800 tons and an average daily consumption of only 75 tons of coal, giving the vessel an average speed of 13 knots. They were arranged to carry about 100 to 150 first and second cabin and about 2,400 steerage passengers, besides horses, cattle, etc. It was soon found that the steerage traffic failed to justify such an allowance of space, and, in 1896, the six "A" ships were built, with about the same tonnage as the "P" ships, but with an average length 50 feet shorter, and a coal consumption of only about 36 tons per day, giving the vessel an average speed of 11½ knots. In 1897, a further successful experiment was tried in the construction of the steamer *Pennsylvania*, the largest ship in the world, with a carrying capacity of 14,000 tons and a daily coal consumption of only 90 tons, giving her an average speed of 13 knots. One sister ship of the *Pennsylvania* is now in course of construction at the shipbuilding yard of Messrs. Blohm & Voss, of Hamburg, and will be in service in the course of 1898.

All the vessels of the older fleet (not the express steamers) have been disposed of in one way or another, except the *Scandia*, *Italia*, *Moravia*, and *Russia*, and these will now run regularly between Genoa and La Plata.

Nothing could better illustrate the rapid and complete trans-

formation of the fleet than the fact that the four just mentioned are now engaged in such a trade, while, only four or five years ago, they were the finest ships of the fleet, next to the express steamers. Hamburg now boasts of being the home port of not only the largest steamer in the world (the *Pennsylvania*), but also of the largest sailing vessel (the *Potosi*), a five-master, running regularly to Chile.

The report dwells in a very interesting and significant way upon the emergencies of a high protective tariff in the United States, injurious to German exports, and of a lasting tariff war between the two countries. It scouts the latter possibility as being a most remote one, owing to the mutual need of a full and free commercial intercourse. The report makes the noteworthy statement that, under the McKinley tariff of 1890, the freight traffic of the company showed a marked increase. This disposes of the arguments and protests of this country against the operation of the McKinley tariff in the same way that all the complaints and prophecies in connection with the sugar schedule of the Wilson tariff have been contradicted by actual circumstances. The export of German and Austrian sugars through this port since August 24, 1894, has been greater than for any previous corresponding period since the two years 1890 and 1891. German products have suffered under neither tariff, and these facts ought to prove a forcible argument in the hands of our Government against the protests that are now being made in the foreign press and in higher quarters against tariff legislation.

The company claims that the trade from here to the United States has now reached such proportions that, although they have recently added immensely to their tonnage by the construction of many large vessels, full freights have already been secured in advance by definite contracts.

No fear is entertained that the measures looking to the reduction of immigration into the United States will injure this line, as it has little to do with such classes of emigrants as it is intended to exclude as undesirable. It refers to the large and unsettled arable area of our country and the fact that a protective tariff will increase the opportunities of labor and necessitate the introduction of more laborers.

The Hamburgishe Börsenhalle, March 16, 1897, commenting on the report, gives the following table of the tonnage of the largest steamship companies:

	Tons.
Hamburg-American Line	290, 000
North German Lloyd	265, 000
Peninsular and Oriental Steamship Company	280, 000
Messageries Maritimes	220, 000

No American can read such a report without mortification. He sees this magnificent fleet of ships carrying thousands of passengers and millions of dollars of freight annually to and from the United States, and remembers that but three American steamers have entered this port in over thirty-eight years. He stands on any quay of this busy harbor, and sees the flag of every little petty power that has a few miles of seacoast, but never the American flag. He hears the ever-increasing blows of the hammer in the shipyards of Hamburg, Bremen Kiel, Stettin, Elbing and Rostock, and blushes over his efforts to explain that the *St. Louis* and the *St. Paul* are the beginning of a rejuvenated merchant marine, worthy of the days of the fifties. There are some one hundred steamship lines in this city alone, giving remunerative employment to thousands and thousands of workmen (in a single yard 3,500 men are employed), and the Hamburgers boast that they now possess regular lines of modern steamers to every quarter of the globe.

It is estimated that the United States pays $300,000,000 annually to the owners of foreign vessels for transporting American products alone. This entire amount could not be suddenly, or even eventually, transferred from foreign to American pockets, but the greater part of it could be saved; and what is quite as important, immense industrial opportunities would be opened to American artisans under a Government policy that would protect and encourage shipbuilding. Hamburg, with astounding rapidity, has become the great distributing center of Europe for the whole world, in late years surpassing both London and Liverpool in the amount of tonnage annually entering and clearing. Nowhere can the pulse of international trade be so accurately taken as in this great market, and nowhere can the prosperity of a nation with a powerful merchant marine be more readily seen.

W. HENRY ROBERTSON,

HAMBURG, *April 30, 1897.* *Consul.*

PRODUCTION OF PIG IRON IN GERMANY.

Upper Silesia, in this consular district, with its vast and rich beds of iron and coal, is justly esteemed to be the pearl of Prussia.

I have, therefore, concluded that it would be of interest to her American rivals if I were to show the rôle she has taken in the production of iron by quoting from the statistics of the Society of German Iron and Steel Manufacturers. The production of all kinds of pig iron by the blast furnaces of the German Empire (including

Luxemburg) during the quarter ended March 31, 1897 (in tons of 2,204.6 pounds) was:

Months.	Puddled and specular.	Bessemer.	Thomas.	Foundry.	Total quantity.	Same period, 1896.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
January	136,495	47,481	295,047	85,341	564,364	497,481
February	129,682	39,951	267,756	82,570	519,959	481,250
March	140,913	57,582	288,124	88,614	575,233	531,750
Total	407,090	145,014	850,927	256,525	1,659,556	1,513,481

Of this quantity, Upper Silesia produced:

Months.	Puddled and specular.	Bessemer.	Thomas.	Foundry.	Total quantity.	Same period, 1896.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
January	29,548	991	18,809	4,902	54,250	45,818
February	27,622	1,525	16,965	4,308	50,420	47,302
March	32,896	13,573	7,227	3,415	57,111	52,112
Total	90,066	16,089	43,001	12,625	161,781	145,232

The increase of the pig-iron production in the German Empire, which was observed during the year 1896, has continued during the first quarter of 1897. According to the foregoing synopsis, the total production of pig iron has increased during the quarter in question, in comparison with the same quarter of last year, 146,075 tons, or 9.65 per cent. Upper Silesia, in the same comparison, shows an increase of 16,549 tons, or 11.39 per cent. Also, compared to the preceding quarter, the total production has resulted in an advance of 7,768 tons, or 0.47 per cent; for Upper Silesia, an advance of 4,473 tons, or 3.04 per cent.

The pig-iron production reached, during the first quarter of this year, a higher standard than ever before. It was caused by the considerably increased demands of the various works which consume pig iron which are situated in the district. The blast-furnace works reached the utmost limit of their capacity and had to make enlargements. The share of Upper Silesia in the total production amounted to 9.5 per cent during the quarter ended December 31, 1896, and rose during the first quarter of 1897 to 9.75 per cent, while it was only 9.25 per cent during the same period of the preceding year.

The consumption of Upper Silesian manufacturers was so large that only 11,017 tons, or 6.8 per cent, of the whole production remained in stock, compared to 11,347 tons, or 7.8 per cent, during the corresponding quarter of 1896.

There were exported (exclusive of foundry pig iron) 170 tons to Austria, 225 tons to Russia, and 40 tons to Roumania; in all, 435 tons.

In regard to the apportionment of all kinds of pig iron, the percentage was as follows:

Description.	In the German Empire.			In Upper Silesia.		
	1896.	First quarter of 1897.	First quarter of 1896.	1896.	First quarter of 1897.	First quarter of 1896.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
Puddled and specular	26.55	24.53	27.85	57.3	55.67	58.28
Bessemer	8.1	8.74	7.17	5.06	9.94	5.31
Thomas	51.13	51.27	51.36	29.02	26.57	29.26
Foundry	14.2	15.45	13.61	8.6	7.8	7.14

According to this synopsis, the production of Thomas and puddled and specular pig iron is the largest; but the production of puddled and specular pig iron has considerably decreased in favor of all other kinds of iron. Furthermore, there was observed a rapid decrease of all kinds of iron in Upper Silesia during the quarter in question in favor of Bessemer iron.

FREDERICK OPP,
Consul.

BRESLAU, *June 23, 1897.*

GERMANY AND RUSSIA.

The importance of Russia to any manufacturing people can not be overestimated. The idea that the great northern Empire, eager to make the most of its marvelous resources, will soon be able to supply its own needs, is absurd; more absurd than to think South America, South Africa, or Australia could have been developed without foreign capital. In Russia, the people are poor, and have been poor for centuries. Serfdom was abolished within man's memory. Capital has gone in slowly. Russia's great needs are machines, tools, implements, etc., and more will be wanted in the future, especially such as are made and used in the United States.

The purchasing power of the Empire's peasants is small. As it increases, as the vast regions, long neglected, are brought under cultivation, capital will accumulate and capital will go in. The money markets of the Old World are full. Public debts are being refunded at interest rates that hardly pay. Money will make its way into places where the highest rates of interest are given. As the Russians increase in skill, technical knowledge, etc., as railroads

open up more and more the mountainous regions and the vast plains of Siberia, the demand for tools, implements, and machinery will be ten times what it is to-day, and will far exceed the local supply.

The manufacture of cast steel and cast iron that can be hammered is in its infancy. Foreign iron pays heavy freights and heavy duties. The Russian product is inferior, and people soon find out that the best is the cheapest. Thus, for years to come, Russia must buy outside.

Germany expects to do a large export business with the sister Empire. The special aim is to supply agricultural machines. Economic writers urge that efforts be made to overcome the English, but most of all, the powerful, advancing American competition. To-day, the chances of the three countries are about equal. Energy, industry, perseverance, and skill will gain the market for the United States. The factors of success will be found, as consuls have so often pointed out, in the exhibition of working models by men able to speak the Russian language; in selling machines, parts of which can be easily obtained; in giving long credits; and in advertising in the Russian, rather than in the English, language. Germany sent Russia, in 1894–95, iron, ironware, machines, wagons, and instruments worth 111,000,000 marks ($27,000,000), *i. e.*, after the new treaty went into effect. In the years just preceding, she sent iron and ironware worth only 56,000,000 marks (a little less than $14,000,000). The year 1896 makes a still better showing, especially in agricultural machines. Of these, she sent, in 1896, to the value of 33,000,000 marks; in 1895, 23,000,000 marks; and in 1894, 16,000,000 marks.

As soon as the Russian Government complies with the demands of its farmers and lowers duties on agricultural implements, Germany hopes not only to do a much larger business, but to almost monopolize this line. It is a question whether a reduction of rates on iron and steel will help here very much, since Russia is rendering all the aid in her power to further the importation of raw iron out of Finland. Since the new tariff regulations regarding the importation of raw iron from Finland, the quantity imported went up from 400,000 poods (14,444,800 pounds) annually to 1,500,000 poods (54,168,000 pounds). This was a great shock to the German smelters. They have not recovered, for Finland's iron is good, easy to get at, and cheap. In 1903, Russia and Finland are to have no duty or tariff boundaries between them.

United States manufacturers can see how necessary it is to make efforts in Russia at once. Russia regards us with the friendliest feelings. The vast steppes are analogous to our plains, and they are to be planted. Cotton is being grown beyond the Caucasus; mines are to be opened up in the Urals, Caucasus, Siberian, and

Jablonnai hills; vines are to be planted, orchards laid out, forests cleared, canals dug, and railroads, bridges, and highways built. The battle is to be between the United States, England, and Germany.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *June 5, 1897.*

IRON INDUSTRY IN RUSSIA IN 1896.

According to the statistics collected by the central office of the Russian iron manufacturers, the iron works in Russia produced, in 1896, 98,414,000 poods (1,776,963 tons) of cast iron, 30,661,000 poods (553,615 tons) of iron, and 42,596,000 poods (768,113 tons) of steel. Of the above quantity of cast iron, 92,145,000 poods (1,663,770 tons) were produced by 187 private iron works, 4,404,000 poods (79,519 tons) by 21 Government iron works in European Russia, 1,271,000 poods (22,949 tons) in the iron works of Finland, and 594,000 poods (10,725 tons) in Siberia. This is an increase of 9,629,000 poods (173,861 tons) over 1895, in which year the output of cast iron amounted to 88,785,000 poods (1,603,102 tons).

The largest quantity of cast iron, namely, 38,995,000 poods (704,094 tons), was smelted by 8 iron works in the southern region, while the 91 private and 13 Government works in the Ural produced 35,457,000 poods (640,212 tons). Thus these two regions produced over 74,000,000 poods (1,336,144 tons), whereas the other regions together produced only about 22,000,000 poods (397,232 tons), namely: The northern, 357,000 poods (6,446 tons); the Moscow, 8,226,000 poods (148,529 tons); the southwestern, 174,000 poods (3,142 tons); and the Polish, 13,062,000 poods (235,847 tons).

The import from abroad of cast iron, iron, and steel into Russia during 1896 was: Cast iron, 4,592,000 poods (82,913 tons); iron and steel, unwrought, 23,009,000 poods (415,455 tons); iron and steel articles, 2,744,000 poods (49,546 tons); and machines and apparatus 5,269,000 poods (95,137 tons). The iron, steel, and manufactures of the same amounted to 31,022,000 poods (560,133 tons), which, if changed into cast iron (counting 1½ poods of cast iron for every pood of iron), would give 46,533,000 poods (840,200 tons). This, together with the 4,592,000 poods (82,913 tons) of cast iron imported into Russia, will make a total of 51,125,000 poods (923,113 tons). From the foregoing, it can be seen that, in order to satisfy the requirements of Russia's interior market, it required, in 1896, 149,540,000 poods (2,700,094 tons) of cast iron, which, according to the population of 130,000,000, shows 1.1 poods (39.72 pounds) per head.

The quantity of cast iron smelted, the import from abroad, and the consumption in Russia during the last four years can be seen from the following:

Description.	1893.		1894.	
Cast iron:	*Poods.*	*Tons.*	*Poods.*	*Tons.*
Smelted	70,863,000	1,279,502	80,144,000	1,447,080
Imported	9,799,000	176,931	9,441,000	170,467
Total	80,662,000	1,456,433	89,585,000	1,617,547
Consumption of iron, steel, and articles imported	102,440,000	1,849,657	127,655,000	2,304,939
Per head	0.8		1	

Description.	1895.		1896.	
Cast iron:	*Poods.*	*Tons.*	*Poods.*	*Tons.*
Smelted	88,785,000	1,603,102	98,414,000	1,776,963
Imported	8,106,000	146,362	4,592,000	82,913
Total	96,891,000	1,749,464	103,006,000	1,859,876
Consumption of iron, steel, and articles imported	136,281,000	2,460,690	149,510,000	2,699,552
Per head	1.1		1.1	

I add data showing the production and consumption of cast iron in 1896 in the principal countries of Europe and in the United States:

Countries.	Quantity of cast iron produced.		Production of cast iron.	Quantity of iron produced per head.		Consumption of cast iron per head.	
	Poods.	*Tons.*	*Per cent.*	*Poods.*	*Pounds.*	*Poods.*	*Pounds.*
United States	585,671,000	10,574,875	33.6	5.9	213	8.8	307¼
Great Britain	447,614,000	8,082,118	25.6	11.4	411⅔	6.8	245½
Germany	333,664,000	6,024,637	19.1	7.1	256⅓	5.4	192
France	122,460,000	2,211,138	7.1	3.3	119	3.2	115½
Russia	98,415,000	1,776,981	5.6	0.7	25¼	1.15	41½
Austria-Hungary	65,983,000	1,191,389	3.8	1.4	50½	1.5	54
Belgium	50,619,000	913,977	2.9	8.1	292½	6.6	238⅓
Sweden	28,262,000	510,299	1.6	4	114½	2.9	104¼
Spain	12,604,000	227,578	0.7	0.92	33	1.6	57¼
Total	1,745,292,000	31,512,992					

The percentage relation of the duty to the price of cast iron in Russia in 1896 was: Price per pood (36.112 pounds) of cast iron in St. Petersburg—Cleveland, 85¾ copecks (44 cents); shots, 1.01 rubles (52 cents); duty per pood, 30 copecks (23 cents); percentage relation of the duty to the price—Cleveland, 111 per cent; shots, 80 per cent.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *June 17, 1897.*

RUSSIA'S COTTON INDUSTRIES.

Cotton manufacturing ranks first among Russian industries. In 1843, there were 356,000 cotton spindles, each turning off 36 pounds of yarn; at present, there are 5,000,000 spindles, each turning off more than 72 pounds per annum.

The demand for raw cotton is slowly but surely being supplied by the plantations in central Asia and the Caucasus. The cotton district in central Asia has increased from 61,000 to 136,000 dessiatines (1 dessiatine=2.6997 acres). The land fit for cotton cultivation in the Turkestan territory amounts to 2,200,000 dessiatines; and of these, 1,500,000 dessiatines are already irrigated. Besides Turkestan, lands beyond the Caucasus grow cotton, yielding already 600,000 poods (21,667,200 pounds). Russia uses 12,500,000 poods (451,400,000 pounds), or one-tenth of all the cotton produced in Europe and America. Since Russia began to build mills and spin for herself, the imports of cotton yarns have steadily decreased. In 1883, 226,000 poods (8,161,312 pounds) were imported; in 1894, 139,000 poods (5,019,568 pounds). The quantity imported bears to the home product a ratio of 1 to 80. From 1883 to 1890, an average of 140,000 poods of sewing and knitting yarns were imported; in the years 1891 to 1894, it was not more than 50,000 poods. The imports of cotton cloths amounted, in 1883, to 454,000 poods (16,394,848 pounds), and decreased in 1894 to 169,000 poods.

RUSSIA'S COTTON EXPORTS.

Russia is sending large quantities of cottons to Persia, Turkey, Roumania, and China; efforts are being made to find markets in South America. Of Persia's cotton-cloth imports, Russia supplies 30 per cent. Its greatest competitor in the nations named is England. From 1887 to 1890, the average cotton-cloth exports were 48,000 poods (1,733,376 pounds); in the years 1891 to 1894, 73,000 poods (2,636,176 pounds), half of which went to Persia. The total value of Russia's cotton trade, with a production of 10,500,000 poods (379,176,000 pounds), amounts to 350,000,000 rubles,* giving it the first place among the Empire's industries. To farm and manufacture so much cotton, Russia needs machines such as have been successfully used in the United States. Gins, pickers, cards, slubbers, spinning frames, mules, and warping, dressing, and dyeing machines are needed to carry on Russia's cotton and textile industries. By some

*The consul does not say whether the gold or silver ruble is meant. The value of the gold ruble is 77.2 cents; the silver ruble, on April 1, 1897, was 37.4 cents.

one these things must be supplied. The Germans have agents in every corner of Russia. Many of Saxony's large spinning concerns have branch houses there.

J. C. MONAGHAN,

CHEMNITZ, *April 24, 1897.* *Consul.*

EXPORT OF RUSSIAN FLOUR.

Energy is shown by the Russian millers, supported conscientiously by their Government, in increasing the export of their products. They try to find the real cause which prevents their export of flour, for, in spite of their efforts and the assistance accorded them by the Government, their export trade is scarcely developed. According to official statistics, which are completed up to December 1, 1896, European Russia exported in the space of eleven months, *i. e.*, from January 1 to December 1, 1896, 627,518 barrels of wheat flour and 719,292 barrels of rye flour; in all, 1,346,810 barrels. Out of that quantity there were exported into Finland alone 261,259 barrels of wheat flour and 613,719 barrels of rye flour, or, together, 874,978 barrels. These figures show that European Russia exported to foreign countries during the first eleven months in 1896 only 366,259 barrels of wheat flour and 105,573 barrels of rye flour, or, in all, 471,832 barrels. When the Russian millers ship flour for export, the railways deduct 10 per cent from the general freight tariff on such flour; and when grain is shipped to a mill in some port to be ground into flour for export, a deduction of 7 per cent is made by the railways.

Exporting millers held a meeting recently for the purpose of devising some method for increasing their trade. They acknowledged that, so far, they had been unable to find the real reason for the poor exports of Russian flour, but they are satisfied that the rebate given by the railways does not bring the desired result. In the London market, the prices of flour are, on an average, 40 copecks (20½ cents) per pood (36.112 pounds) lower than in Russia, which makes 2 rubles ($1.02) per sack. Some gave as a reason for this that grinding of grain in England is much cheaper than in Russia, on account of the machinery being better and capital more available; others, again, claim that London does not use the best grades of flours, such as Russia manufactures for export, but demands only the middle grades. But they agree that the condition of the flour markets has recently changed at home as well as abroad, that the former difference in price of 2 rubles per sack has greatly decreased, and that there is now a prospect for the export of their flour at a profit.

A request was addressed to the railway department to increase

the privileges granted on the flour transported for export. The following demands were submitted:

(1) That the deduction of the freight tariff on flour (including, also, groats, millet, and malt) for export abroad should be increased from 10 per cent to 20 per cent; and on grain, groats, millet, and grain transported to mills in ports to be prepared for export flour, from 7 per cent to 15 per cent, on the ground that less than 75 per cent of good flour for export is produced.

(2) That the rebate should be paid not later than within one month, and the time for presenting the custom-house documents relating to the export of grain should be extended to a month.

(3) That flour intended for export should be transported by fast freight trains, without delays, and transferred from one railway to another so as to avoid all damages.

(4) That the expenses of transfer from railway to vessels, and also the rate from the ports of the Baltic Sea, should be reduced.

The general meeting of the representatives of Russian railways considered the miller's petition favorably, and expressed their readiness to grant all the claims possible for the development of the export of flour. They answered the representatives of the millers that, as to the increase of the rebate, a new grain-freight tariff law would shortly be adopted, and the question of percentage of rebate would have to be postponed until the main question was decided. To facilitate the accounts of the exporters with the railroads, they propose not to make the reduction in a percentage relative to the tariff, but to fix it once for all. Such a method is already in use by some of the southern railroads, by special agreement with the Novorossisk millers, and it is found convenient and advantageous, especially in avoiding misunderstandings. The other demands of the millers the representatives of the railways expressed themselves willing to grant. The question as to the lowering of the sea freight rates will be laid before the meeting of the Northern Sea Communication. There is no doubt that everything will be done to facilitate the export of Russian flour to foreign markets by the Russian railroads.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *June 12, 1897.*

RUSSIAN GRAIN IN GERMANY.

It may be of interest for our commerce to hear that the United States is not the only country to the import of whose agricultural products Germany objects. Complaints are made in Russia against the German Agrarian party, on the ground that they are trying to ruin the Russian grain trade in Germany. The Agrarians are charged

with discrediting the Russian grain by saying that it is of bad quality, dangerous from a hygienic standpoint, and that each gram of it contains millions of bacteria. The first trouble between Russia and Germany was a high tariff. The commission appointed by Russia and Germany in 1893 to negotiate a commercial treaty could not come to satisfactory terms, and the tariff war between the two countries continued. Russia announced her determination to enforce the maximum tariff against Germany, which was a discriminating duty of from 20 to 30 per cent on all imports, from August 1, 1893. Germany, in answer, decided to levy an additional import duty of 50 per cent on articles imported from Russia. The principal export from Russia to Germany consists of agricultural products, and the principal export from Germany to Russia of manufactured articles. The business of both countries suffered greatly in consequence, until March, 1894, when a new and friendly treaty of commerce between Russia and Germany went into effect. Russia soon resumed her former position as the source of a large portion of the imported cereal supplies of Germany. Then the German Agrarian party commenced to find fault with Russian grain. The Messenger of Finance, an official paper published in St. Petersburg, in its edition of May 30, 1897, says in defense:

Every one knows that the Agrarian party has acquired a great influence in the economical, commercial, and financial policy of Germany, and sometimes to the detriment of the real interests of agriculture, which it does not understand; and that this party misuses its political influence. All its efforts are directed to destroy, or at least to weaken, the competition presented in the interior market by foreign produce. The party asserts that the decline in prices of agricultural products is due to the competition, forgetting that this decline was caused by a general increase of offers in the international market, and that it is useless to take measures which affect only the German market.

Conscious of its power, the party persists in its pretensions, and in the contest with foreign competition does not stop even at measures which result in hampering commerce and which exercise a bad influence upon the interests of local agriculture. The representatives of the German Agrarian party use little discrimination, and often present arguments that seem absurd to those with a real knowledge of the matter. One of these was the charge that Russian grain was of bad quality, and so caused the fall of prices in the German market. With the aid of such groundless accusations, the German Agrarians hope to discredit Russian grain in the eyes of the purchasers, who do not understand the real situation. At the last yearly meeting of the Union of German Farmers, one of the representatives of the Agrarian party went still further and declared that the import of Russian grain should be prohibited because each gram contained several million bacteria.

Such a statement, of course, deserves no serious attention; but complaints against the bad quality of Russian grain and the claim that it causes a general fall in the prices can deceive the people. Therefore, we can not but welcome the serious and detailed refutation of the undeserved accusations which has just appeared in German literature, especially when it is written by such a competent person as the representative of the firm of Emil Meyer, so well known in the German grain trade. This pamphlet, entitled Die Schuld der deutscher Landwirthschaft an niedrigen

Getreidepreisen durch die Erzeugung mindeswerthigen Getreidearten (The Inferior Quality of Grain Raised by German Farmers Responsible for the Low Prices), has attracted the attention of all persons interested in the grain trade, as it not only refutes the above accusation against the Russian grain, but proves that it can be more justly applied to German grain. Thus it appears that German Agrarians, conscious of their own responsibility for the fall in price of grain, hastened to accuse Russian agriculture, and repeated their statement so often that it gradually became accepted and passed without criticism—a method often adopted with success by the Agrarian party.

In his pamphlet, George Meyer, first of all, objects to the customary accusation of the Agrarians that the grain traders find it advantageous for the price of grain to be low and force it by flooding the market with cheap foreign grain of bad quality. From a general point of view, the grain trader is not interested either in keeping prices down or in the poor quality of the grain circulating on the market. Of course, in the daily fluctuation of prices, he tries to buy as cheap as possible; but, in general, a high level of prices is more advantageous to him than a low one, because his profit consists in a certain fixed percentage of the amount of stock involved, and the profit increases if the prices are high. In regard to the quality, the grain trader is only interested in grain which is most in demand, and, therefore, the easiest to be sold. The requirements concerning the quality of the grain are established by the real consumers—the millers, the bakers, and the public. The accusation that the traders voluntarily make the prices fall by importing cheap and bad foreign wheat must be therefore considered, a priori, untrue. But, in reality, the refutation of the accusation offers no difficulty. Foreign wheat is imported principally for use in mixtures for milling purposes, in order to improve local grain, from which the foreign wheat distinguishes itself by containing a larger quantity of gluten. The best kinds of the Danube wheat, Russian saksonka, winter wheat and girka, American red winter wheat, and the hard Argentine wheat are used. This explains the continual increase of the import, independent of the quantity of the local crop. In proportion to the increase of the consumption of flour (which depends on the condition of the population), the import of foreign wheat must also increase, even if the local production could supply the home consumption. It is natural, also, that the foreign grain, being of better quality than the local grain, should be valued at a higher price; and the prices of foreign wheat during the last two years were higher in the interior markets than the prices of local grain. The author proves this statement by figures. It is plain that, under such conditions, foreign wheat could not depress the price of local grain. The same can be said about Russian rye. Even poor varieties, with small grains and full of weeds, have great advantages as compared with the local rye. It is not difficult to clean the grain from the weeds, and the Russian grain has very fine skin, is dry, and produces much flour. Besides, flour obtained from Russian rye produces bread of heavier weight, and therefore this flour is in special demand. It is not strange that the prices of Russian rye, as well as wheat, are higher than those of local grain.

The above data fully proves the inconsistency of the accusations. The author of the pamphlet does not stop here, however, but pays special attention to the attacks of the Agrarians against trade at a fixed rate of exchange, the prices of which they claim are always lower than the value of goods of high quality. The statement is quite true, but the author draws a conclusion opposite to the one made by the Agrarians. The latter see in it the tendency of the merchants to keep down the prices by agreements, covered afterwards by the import of cheap grain. The author says that it is the local and not the foreign grain that depresses the prices. It has been said before that German grain is inferior to the foreign product. When contracts are made, the quality of the goods is mentioned only in general terms, without *showing* the country of production, the quantity of gluten they are to contain, and

the quantity of flour to be produced from a certain quantity of grain, and other qualities important to the consumers. These conditions are not specified in the contracts, for the reason that they can not be defined at first sight. The purchaser, buying a lot of grain for a certain term, can never be sure that he will not get the inferior local grain; therefore, the prices are fixed at the rate for the cheapest goods.

But why is the German grain of poorer quality? It is the fault of the agrarians—the farmers themselves. About twenty-five years ago, German wheat was known for its good qualities, and was an article of export, especially to England, where it was used for improving milling mixtures in the same way as Russian and American grain is now used in Germany. The large farmers, tempted by the productiveness of English wheat, the average crop of which is 18 centners (34 bushels) per morgen (0.63 acre), whereas the local kind only gave 10 centners (19 bushels), imported seed from England, and gradually the English wheat supplanted the local product in Germany. But what was gained in quantity was lost in quality; English wheat grows abundantly, has large grains, containing much starch, and produces much flour, but it is not nourishing; it can not be used alone by the mills. To obtain from it the proper kind of flour, a wheat containing a certain quantity of gluten must be added. The difference in the size of the grains and in their firmness necessitates the substitution of rollers for millstones. Of course, the millers refuse to pay high prices for such quality of wheat. The same is observed with rye. Rye cultivated by the German farmers has a large grain, with very thick skin, and contains much water; therefore, the flour obtained from it is very raw and absorbs little water when worked into dough, which, of course, diminishes the quantity of bread produced from such flour. The consumer, naturally, does not wish to pay for German rye, with which he has to buy a considerable quantity of water, the same price which he pays for foreign dry rye.

Thus, the responsibility for the decline of prices in the German market—inasmuch as the local decrease exceeds the general depreciation of grain in the international market—does not fall on the import trade and foreign competition, but on German agriculture.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *June 5, 1897.*

THE RUSSIAN CENSUS OF 1897.

The first general census of the population of the Russian Empire was carried out very successfully in the time specified by the principal census commission. It must be remembered that it is more difficult to take a general census of Russia than of any other country on the globe, owing to the extensive territory, the hardships of the climatic conditions in winter, the shortness of the winter days, and the great diversity in education of the inhabitants. Furthermore, the rural population is generally illiterate, and the work of preparing and answering the required questions on the blanks had to be done exclusively by the census takers, instead of by the peasants themselves. When, under such conditions, the work has been done in three months, the management should receive credit. An army of over 150,000 census gatherers and officials were employed, under the direction of the different managers of the census districts and census establishments.

According to this census of 1897, the population of the whole Russian Empire, as now published, is 129,211,113, of which there are 64,616,280 males and 64,594,833 females. The following table shows the population by separate territories of the Empire:

Territories.	Males.	Females.	Total.	Inhabitants per square verst.*
In 50 governments of European Russia..	46,433,636	47,755,114	94,188,750	22.2
In 10 governments of the Kingdom of Poland	4,753,879	4,688,711	9,442,590	84.6
In 11 governments and regions of Caucasus	5,129,931	4,593,622	9,723,553	23.6
In 8 governments and regions of Siberia	2,959,557	2,772,175	5,731,732	†0.5
In 3 regions of Turkestan and Transcaspian region...	2,281,340	1,893,761	4,175,101	3.9
In 5 regions of steppes	1,803,560	1,611,614	3,415,174	1.6
In the Grand Duchy of Finland	1,250,426	1,277,375	2,527,801	8.8
Russian subjects in Buhara and Khiva	3,951	2,461	6,412	.....
Total	64,616,280	64,594,833	129,211,113	6.8

* 1 square verst=0.43916 square mile.

† The whole of Asiatic Russia, if the transural districts of Perm and Orenburg governments are added thereto, contains 15,300,000 inhabitants.

This census shows 19 cities containing over 100,000 inhabitants each, 35 cities from 50,000 to 100,000, 69 cities from 25,000 to 50,000, 13 cities from 10,000 to 25,000, and 3 cities from 5,000 to 10,000.

The following table shows all the cities containing above 50,000 inhabitants:

Cities.	Population.	Cities.	Population.
St. Petersburg	1,267,023	Jaroslav	70,610
Moscow	988,610	Kherson	69,219
Warsaw	614,752	Orel	68,558
Odessa	404,651	Vitebsk	66,143
Lodz	314,780	Ekaterinodar	65,697
Riga	282,943	Zshitomir	65,452
Kiev	248,750	Revel	64,578
Kharkov	170,682	Libau	64,500
Tiflis	159,862	Belostok	63,927
Vilna	159,568	Namangan	61,906
Tashkent	156,506	Elisavetgrad	61,841
Saratov	133,116	Cronstadt	59,539
Kazan	131,508	Kremenchug	57,879
Ekaterinoslav	121,216	Tsaritsine	55,914
Rostoff-on-Don	119,889	Penza	55,680
Astrakhan	113,075	Samarcand	54,900
Baku	112,253	Kokand	54,452
Tula	111,048	Sebastopol	54,442
Kishinev	108,506	Berdichev	53,728
Nijni-Novgorod	98,503	Tver	53,477
Nikolaev (government of Kherson)	92,060	Poltava	53,060
Samara	91,659	Kursk	52,908
Minsk	91,113	Tomsk	52,430
Voronezsh	84,015	Novocherkask	52,005
Kovna	73,543	Taganrog	51,748
Orenburg	72,740	Irkutsk	51,484
Dvinsk	72,231	Ufa	50,576

At present, the local commissions are completing the final verification of the data collected. More than one-half is ready and has already been delivered to the central statistical committee, specially organized for the purpose of working out, on an extensive scale, the details of all the census returns.

From the time of Peter the Great up to the beginning of the second half of the present century the only enumerations that were fairly reliable were the so-called "revisions." There were ten of these, five in the past century and five in the present. The manifest of Nicolas I at the time of the seventh revision, in 1833, expressed a desire that the population of the whole Empire should be shown, if possible. The necessity of having such a census taken was fully recognized by both Peter I and Nicolas I, and the ignorance and lack of organization of the census bureau were responsible for the poor success.

The first correct information concerning the real apportionment of the whole population of the Empire is given by the general census. These figures, however, can be compared only with the figures of the revision in 1851, when the population was 67,380,645, because, during serfdom, the peasants generally lived where they were enrolled, and, on account of the absence of railroads and convenient highways, changed their residence little. A comparison of the figures of the present census with those of 1885 (given as 108,819,332 by the central statistical committee) should be made with more caution. The figures of 1885 were based upon the family registers of 1876, and these statistics, on account of the shifting of the public masses, are far from being trustworthy. Thus, in forty-five years, the population of Russia doubled, and during the last twelve years has increased 20 per cent. The distribution of the 94,000,000 inhabitants in European Russia depends principally upon the natural and economic conditions of the plain of Russia, which is cut diagonally from Podolia and Bessarabia to the government of Viatka by the chernoziom (black earth) region. This region comprises less than 1,500,000 square versts (658,740 square miles), but if the non-chernoziom governments, in which is included the Moscow industrial district, be added thereto, it contains more than 1,700,000 square versts (746,572 square miles), *i. e.*, two-fifths of the whole plain of European Russia, which, according to the census, is inhabited by 63,000,000 people, or by two-thirds of the whole population of European Russia.

The most compact population is centered on the narrow strip formed by the governments of Podolia, the chernoziom part of Volyn, the larger part of Kiev and Poltava, the chernoziom part of Chernigov, the nonsteppe chernoziom parts of Kharkov and Voronezsh,

and the chernoziom parts of Orel, Tambov, Riazan, and Tula. The collected data show further that the population of Russia during the last thirty-five years has not only increased, but has also made great progress in the way of advanced civilization.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *June 10, 1897.*

INCREASED EXPORTS FROM MANCHESTER TO THE UNITED STATES.

I send a statement of exports hence to the United States for six months of 1897, compared with the same period of 1896. The United States is being flooded with goods. I do not, of course, instance this district only, for I am told of enormous shipments in woolens and worsteds from all Yorkshire, of linens and jute goods from Ireland and Scotland in immense proportions, and of curtains, laces, and hosiery from the Nottingham-Leicester district, etc.

Total of six months' exports (from January 1 to June 30, 1897) from Manchester to the United States.

Months.	1897.	1896.
First quarter:		
January	$569,952.41	$1,358,339.79
February	753,591.93	1,285,024.31
March	1,001,680.37	1,106,823.93
Total	2,425,224.71	3,750,188.03
Second quarter:		
April	1,819,383.73	824,053.75
May	1,059,315.59	878,657.53
June	1,192,738.86	1,007,426.61
Total	4,071,438.18	2,710,137.89

The figures show a decrease in the first quarter of 1897, compared with the first quarter of 1896, of $1,324,963.32, and an increase in the second quarter of 1897, compared with the same period in 1896, of $1,361,300.29.

WILLIAM F. GRINNELL,
Consul.

MANCHESTER, *July 3, 1897.*

EGGS IN GERMANY.*

Having been requested by American firms in the egg trade to furnish statistics as to the production and consumption of eggs in Wiirtemberg and to express an opinion as to the market for the intro-

*These reports on eggs were forwarded in response to inquiries by a dealer in New York City, to whom copies of the reports have been sent.

duction of American eggs into this country, and, further, as to the use of desiccated eggs, I transmit the following statistics as to Germany, having been able to get no reliable figures for Würtemberg only.

I find that Germany, next to Great Britain, is the largest consumer of eggs in Europe. By the statistics of 1890, 50,000,000 chickens were reported in the Empire, and it was estimated that 3,500,000,000 eggs were supplied from this source, besides which there was an import of 800,000 double cwts. (176,368,000 pounds), valued at 70,000,000 marks ($16,660,000). In 1896, there was an import of 890,000 double cwts. (196,209,400 pounds), valued at 80,000,000 marks ($19,040,000). Against this import, we find, in 1890, an export of only 7,719 double cwts. (170,173,254 pounds), valued at 700,000 marks ($166,600).

Eggs are usually imported in cases weighing 100 kilograms (220.46 pounds), containing an average of 1,440 eggs each, which are valued at about 4 to 5 pfennigs (0.952 to 1.19 cents) apiece.

It appears that the net importation, after deducting the small export, amounts to about 1,520,000,000 eggs. From the whole importation of about 850,000 double cwts. (187,391,000 pounds), about 400,000 double cwts. (88,184,000 pounds), equaling 720,000,000 eggs, come from Russia; Austria-Hungary furnishes about 380,000 double cwts. (83,774,800 pounds), or 680,000,000 eggs; Italy, 50,000 double cwts. (11,023,000 pounds), or 90,000,000 eggs; Holland, 10,000 double cwts. (2,204,600 pounds), equal to 18,000,000 eggs; and other countries, 9,000 double cwts. (1,984,140 pounds), equaling 15,000,000 eggs.

Following these figures further, it would give a consumption of about 100 eggs a year for each inhabitant of the Empire. The only reason I can discover why Germany does not produce sufficient eggs for her own consumption, and why she is obliged to pay from 70,000,000 to 80,000,000 marks ($16,660,000 to $19,040,000) a year for eggs imported from other countries is the excessive dampness, causing a large mortality among young chickens, and the further fact that large districts are occupied by extensive estates, where the peasantry live in villages, which prevents a large number of flocks being kept. It is a well-known fact that the keeping of chickens is remunerative only to those peasants who have small places of their own.

In all districts are to be found wholesale dealers in eggs, who buy up all small lots offered and pack and prepare them for the large markets.

Different processes are used for the preservation of eggs, successful, however, only with eggs to be used for cooking purposes. In the great cities, it is difficult, if not impossible, to get thoroughly fresh eggs, suitable to be eaten boiled.

It is interesting to note the difference in weight in eggs imported. We find 1,000 Austrian eggs averaging 50 kilograms (110.23 pounds); the Russian eggs average 48 kilograms (105.82 pounds); whereas the Italian eggs rise to 58 kilograms (117.63 pounds) per 1,000. There being, also, an extensive importation of dressed and live fowls and feathers into this country, it is estimated that Germany pays yearly for fowls and products therefrom a sum considerably exceeding 100,000,000 marks ($23,800,000).

I have been unable to get any statistics as to the use of desiccated eggs, but from personal inquiries in this district, I find they are not in use here. The largest importer informs me that the facilities for getting Italian eggs are so good that he thinks it would be impossible to introduce desiccated eggs. The opportunity for the export of American eggs to this country would therefore appear to depend entirely upon the price and the condition in which they could be delivered, so as to compete with the other countries above mentioned as large exporters to this market. The proximity of these countries gives them a great natural advantage.

The German duty on eggs is 2 marks (47.6 cents) per 100 kilograms (220.46 pounds).

The retail price of eggs varies, according to season, from 5 to 10 pfennigs (1⅛ to 2⅓ cents) each.

ALFRED C. JOHNSON,
Consul.

STUTTGART, *May 6, 1897.*

EGGS IN NORTHERN GERMANY.

The duty on fresh eggs is 3 marks per 100 kilograms (71 cents per 220.46 pounds) gross; on prepared eggs, solid or liquid, 60 marks ($14.28) per 100 kilograms, with 20 per cent tare allowance.

Eggs are imported from Austria-Hungary, Italy, Russia, and, chiefly, from Galicia. They are packed in long boxes, each containing 24 "schock" of 60 eggs, with a little straw. In cold weather, they keep very well; in hot weather, they are treated with a coating of a solution of what is called "preserving salt." Such eggs, of course, sell for lower prices than "country" eggs.

The prices ruling on the 1st of April were: Wholesale, country, 2.45 marks (58 cents); early winter, 5 marks ($1.19); imported, 2.35 marks (56 cents); early winter, 3.60 marks (85 cents) per "schock," delivered here, with packing free.

Dried "whites" are made in Germany. Of these, I inclose a sample manufactured in Hamburg. They are sold, wholesale, at 1.90 marks (45 cents) per German pound (which is about a tenth heavier

than avoirdupois), and retail at 2.50 marks (59½ cents). They are salable only in times of scarcity.

The yolks are hard to dispose of. Wine dealers give them away mostly to their laborers, after they have made themselves and their families sick of omelets and pancakes. Still, Albert Ferchland, of Magdeburg, Neustadt, manufactures a liquid preparation of yolks, sold to distillers for "Eiercognac" and to restaurants for cooking. The price is 2.20 (52 cents) per liter bottle (1 liter=1.0567 quarts).

Firms recommended for correspondence upon the subject are Beckey & Miehe, Koester & Waldschmidt, and Meyer & Kanne, of Hanover, and H. Kirsten and Rehse & Goedecke, of Hamburg.

E. P. CRANE,

HANOVER, *May 10, 1897.* *Consul.*

EGGS IN SOUTHERN FRANCE.

By information given me, through inquiries which I have caused to be made, I learn that the consumption of eggs in this consular district is largely regulated by the economic conditions dependent upon the season here and the laws of supply and demand in connection therewith. The actual quantity used in this consular district, while large, can not be estimated. The markets and shops are amply supplied at all times, and they can always be had at very reasonable prices. They are supplied by the surrounding country, and also come from the adjacent regions of Italy. I am informed that eggs are sold here at prices ranging from 14 to 22 cents per dozen, according to the season, and that new-laid eggs will, when there is special demand, bring as much as 36 cents per dozen. Those who supply the markets are naturally satisfied with lower prices for sales involving large transactions. I am informed that the supply of eggs is always sufficient for the usual demand, and that large numbers collected during periods of abundance are kept in reserve, by being placed in lime or by other methods of conservation.

The import duty, gross weight, I am told, is 10 francs ($1.93) per 100 kilograms (220.46 pounds), and the city, or octroi, tax is 5 francs (96½ cents) for the quantity mentioned.

It is said that desiccated eggs are not in use, or even known here. Fresh eggs are used whenever necessary, as already stated.

In my opinion, the best way to establish business relations with this country is to create a general agency in Paris, which could introduce goods all over France and also establish subagencies in large towns, when the increase of trade required it.

W. B. HALL,

NICE, *May 10, 1897.* *Consul.*

AMERICAN EGGS IN CUBA.

As the supply of domestic eggs in Cuba has been largely diminished by the depopulation of the rural districts and the town and country fowls consumed have not been replaced by others, the island presents an excellent market for the sale of eggs from the United States. At present, about 3,000 dozen eggs are imported monthly at Santiago de Cuba from the United States. These eggs are brought in crates containing 36 dozen each, and are packed in trays subdivided into small squares so as to separate each egg. To lessen risk of breakage for the ocean voyage, oats are also used in packing.

The price now paid in New York is from 10 to 11 cents per dozen. There is no wholesale price quoted at Santiago, the eggs usually being consigned and sold on commission directly to consumers, bringing 60 cents per dozen in Spanish silver (40 cents in United States gold).

The duty imposed by the Spanish Government upon eggs imported into Cuba is $14 per 100 kilograms (220.46 pounds), to which are added 10 per cent ad valorem transitory tax, $1 per 1,000 kilograms (2,204.6 pounds) discharge tax, $1 per 1,000 kilograms port tax, 5 per cent ad valorem cancellation tax, and 40 cents per 100 kilograms municipal tax, all in Spanish gold, which is at 10 per cent discount compared with United States money. These taxes amount in the aggregate to about 10 cents per dozen eggs, so that when the eggs are put upon this market they cost, including original price in New York, freight, insurance, commissions, duties, and petty expenses, 32 cents a dozen in Spanish gold (29 cents in United States gold).

There is no attempt made to keep eggs from one season to another. Because of the tropical climate, importations at Santiago are usually limited to fortnightly consumption. The general-traffic steamships of the New York and Cuba Mail Steamship Company (American) leave foot of Wall street at 3 p. m. every other Thursday direct for Santiago and Cienfuegos. These vessels also touch every four weeks at Guantanamo and Manzanillo, in this consular district.

The principal consignee for eggs in Santiago is Mr. Julian Cendoya. Other commission merchants dealing largely in such goods are Lescaille, Grimany y Ca., E. Ros y Ca., J. Cuevas y Ca., and Brooks & Co.

JOHN T. HYATT,
Vice-Consul.

SANTIAGO DE CUBA, *May 6, 1897.*

RAILWAY SCHEME IN THE EUPHRATES VALLEY.

The practicability of a shorter route to India than that via the Suez Canal, by means of railway connection from Alexandretta through Aleppo and the valley of the Euphrates to Bagdad, has been clearly established, and a concession from the Ottoman Government to construct this line has been sought for the past twenty-seven years.

In 1870, a well-known English engineer, W. J. Maxwell, was commissioned by a private corporation to survey and report upon the project. He spent over a year between this port and the Euphrates River, but devoted the greater part of the time to prospecting between Alexandretta and Aleppo, a large city 90 miles distant by the present carriage road. Here the most serious engineering difficulties present themselves. The concession was not obtained, and, in fact, I understand permission to use his instruments was never officially granted; but the engineer secured sufficient data to demonstrate before a select committee of the House of Commons the feasibility of constructing a road.

Since then, various other attempts to obtain a firman for this purpose have been made by companies of recognized stability, capitalized generally in France or England, the titular petitioner being always, as the law requires, an Ottoman subject.

The nearest approach to success was made by a French banker named Caporal, residing in Constantinople, who succeeded some three years ago in getting the favorable recommendation of the council of ministers, but the concession was arrested by higher authority. This application for a firman requested, also, an indemnity guarantying 10,000 francs per kilometer ($1,930 per 0.62137 mile) yearly should the line not earn that amount.

The son of the governor-general of this district, himself an engineer, has, he informs me, recently made strenuous efforts to obtain a concession, without asking any indemnity whatever. Chakir Pasha, whose knowledge of this section of the country is exceptional, derived through his investigations as high commissioner of reforms, states his belief that the line from here to Aleppo would run on a paying basis were the cost of construction twice what has been estimated.

The intention of the original promoters was to construct the line over the range of hills east of Alexandretta by the Baylan Pass (2,100 feet). The engineer first referred to studied the old Mont Cenis Railway before proceeding to Syria. Later investigators favor tunneling the pass at a point in the valley where not more than 3¼ miles of excavation is reported necessary. This, by the aid of

causeways on the further side, would shorten the line to Aleppo to 70 miles.

The completion of the line through Bagdad to the port of Grane, or Koweit, would, it is estimated, lessen the time from Europe to India by seven or eight days, the results of which need no comment. The operation of this railroad even to the city of Aleppo would be highly profitable, as all who have so far studied the scheme realize.

Alexandretta is the seaport of Aleppo, which has a population of from 110,000 to 120,000. The district (vilayet), of which it is the capital, has nearly 1,000,000. It is the distributing point of the great caravans that come from Bagdad, the country beyond the Euphrates, and the populous districts of Diarbekir and Mousoul. Much of the freight to and from the Kharput district also passes through Alexandretta over this route.

A good idea of the traffic is obtained from the tally of pack animals (camels, horses, and mules) going and coming over the Baylan Pass above referred to. These number about 500,000 yearly. It is of interest to know that it requires 60,000 camel loads to transport to the coast the licorice root which is yearly shipped to the United States.

The merchandise thus carried gives employment to the French Messageries, the Austrian Lloyd, two English lines (Bell's and Prince), the Khediviah, from Alexandria, and the Turkish Hadji-Daout lines of steamers, each sending four vessels monthly, and to numerous "tramps" and sailing ships.

In the tourist season, the travel would doubtless be heavy, for Aleppo, where Abraham is believed to have lived, is one of the most ancient and interesting of oriental cities, possessing bazaars finer than those of Smyrna, and the intervening route, now too tedious to attract travelers, is replete with interest. The lake and ruins of Antioch, with ancient walls running over the hills 1,500 feet above the river, its Crusaders' Church and Roman castle, and, beyond, the great half-ruined church of Kelat-Seman (somewhat resembling St. Paul's, in London), where is the base of the pillar on which St. Simon Stylites is reputed to have lived thirty years, are a few of the objects of interest.

The concession for the Beirut-Damascus Railway carries authority to extend the line from the latter point to Aleppo, but this has not been done, nor is such action probable, since a railway from this point, which is only a question of time, would be much shorter. It would have the advantage of terminating at the only natural harbor on the Syrian coast—one which affords safe anchorage for any number of vessels. The port dues are trivial, whereas at Beirut, owing to a costly breakwater, they are excessive.

HORACE LEE WASHINGTON,

ALEXANDRETTA, *May 29, 1897.* *Consul.*

NEW TARIFF OF JAPAN.

I have the honor to state that the budget for the year 1897 has been passed without amendment by both branches of the Japanese Diet, it having received the approval of the House of Peers on the 19th instant, and that a statutory tariff bill, regulating the customs dues to be levied in all cases wherein Japan is not bound by treaty stipulations, was passed by the lower house of the Diet on the 17th instant.

As these bills have not yet appeared in the Official Gazette, the publication being contingent upon their receiving the approval of the Emperor, I am unable to send translations by this mail, but hope to forward them by the next outgoing steamer.

EDWIN DUN,
Minister.

TOKYO, *March 23, 1897.*

Under date of April 12, 1897, Minister Dun sends from Tokyo the following translation of the tariff law:

THE CUSTOMS TARIFF LAW.

TARIFF ANNEXED TO PROTOCOL OF THE ANGLO-JAPANESE TREATY, SIGNED AT LONDON, JULY 16, 1894.

	Ad valorem, per cent.
Caoutchouc, manufactures of	10
Cement, portland	5
Cotton:	
Yarns	8
Tissues of all sorts, plain or mixed with tissues of flax, hemp, or other fiber, including wool, the cotton, however, predominating	10
Glass, window, ordinary:	
(*a*) Uncolored and unstained	8
(*b*) Colored, stained, or ground	10
Hats, including also hats of felt	10
Indigo, dry	10
Iron and steel:	
Pig and ingot	5
Rails	5
Bar, rod, plate, and sheet	7½
Tinned plates	10
Galvanized sheet	10
Pipes and tubes	10
Lead (pig, ingot, and slab)	5
Leather:	
Sole	15
Other kinds	10
Linen:	
Yarns	8
Tissues	10
Mercury, or quicksilver	5
Milk, condensed or desiccated	5
Nails, iron	10
Oil, paraffin	10
Paint in oil	10
Paper, printing	10
Refined sugar	10
Saltpeter	5
Screws, bolts, and nuts (iron)	10
Silk, satins, and silk and cotton mixtures	15
Tin:	
Block, pig, and slab	5
Plates	10

	Ad valorem, per cent.
Wax, paraffin	5
Wire:	
Telegraph	5
Iron and steel and rod iron and steel not exceeding one-fourth of an inch in diameter	10
Woolen and worsted:	
Yarns	8
Tissues of all sorts, plain or mixed with other material, the wool, however, predominating	10
Yarns of all sorts, not specially provided for	10
Zinc:	
Block, pig, and slab	5
Sheet	7½

RULE FOR CALCULATING AD VALOREM DUTIES.

Import duties payable ad valorem under this tariff shall be calculated on the actual cost of the articles at the place of purchase, production, or fabrication, with the addition of the cost of insurance and transportation from the place of purchase, production, or fabrication to the port of discharge, as well as commission, if any exists.

TARIFF ANNEXED TO THE PROTOCOL OF THE JAPANESE-GERMAN TREATY.

[Official Gazette of November 20, 1896.]

	Ad valorem, per cent.
Cotton fabrics:	
(1) Cotton velvets	10
(2) All sorts of piece goods wholly of cotton or mixed with flax, jute, wool, or any other spinnable material, cotton, however, predominating	10
(3) Lead, pig or ingot	5
Chemicals, medicines, and drugs:	
(4) Red phosphorus	10
(5) Subnitrate of bismuth	10
(6) Bromides	10
(7) Quinine	8
(8) Chlorate of potash	10
(9) Dynamite	10
(10) Iodide of potash	10
(11) Nitrate of potash	5
(12) Salicylic acid	10
Wires:	
(13) Telegraph wires	5
(14) Iron or steel wires and small iron or steel rods not exceeding one-fourth of an inch in diameter	10
Iron and steel:	
(15) Pig	5
(16) Rails	5
Bars, rods, and plates:	
(17) Of iron	7½
(18) Of steel	7½
Bars, rods, and plates—Continued.	
(19) Galvanized plates (corrugated or otherwise)	10
(20) Tin plates of iron or steel	10
(21) Pipes and tubes	10
(22) Railway carriages and parts of	5
(23) Iron nails	10
(24) Iron screws, bolts, and nuts (including those galvanized)	10
Window glass (ordinary):	
(25) Uncolored and unstained	8
(26) Colored, stained, and ground	10
Dyes and paints:	
(27) Aniline dyes	10
(28) Alizarin dyes	10
(29) Logwood extract	10
(30) Paints in oil	10
Yarns:	
(31) Of cotton	8
(32) Of flax, hemp, jute, wool, etc. (including carded wool)	8
(33) For weaving purposes	8
(34) For other purposes	8
(35) Other sorts of yarns not enumerated	10
(36) Satins of cotton and silk	10
(37) Hops	5

	Ad valorem, per cent.
(38) Hats (including hats of felt)....	10
(39) India rubber, manufactures of)..	10
(40) Flax and hemp piece goods.....	10
Leather:	
(41) Sole.....	15
(42) Other sorts.....	10
(43) Railway engine cars and parts of.....	5
Milk:	
(44) Condensed or evaporated...	5
(45) Sterilized.....	5
(46) Papers.....	10
(47) Paraffin oil.....	10
(48) Paraffin wax.....	5
(49) Portland cement.....	5
(50) Clocks (watches not included) and parts of.....	10
Woolen piece goods (including those of worsted yarns), either wholly of wool or mixed with other material, wool, however, predominating:	
(51) Blankets.....	10
Woolen piece goods, etc.—Continued.	
(52) Flannels.....	10
(53) Mousseline de laine.....	10
(54) Woolen cloths.....	10
(55) Italian cloths.....	10
(56) Other piece goods.....	10
Zinc:	
(57) Block, ingot, and slab.....	5
(58) Thin plates.....	7½
(59) Refined sugar.....	10

RULES FOR CALCULATING AD VALOREM DUTIES.

Duties payable ad valorem under this tariff shall be calculated on the actual cost of the articles at the place of purchase, production, or fabrication, with the addition of the cost of insurance and transportation from the place of purchase, production, or fabrication to the port of discharge, as well as commission, if any exists.

TARIFF AS PASSED BY BILL OF THE IMPERIAL PARLIAMENT AND PUBLISHED IN THE OFFICIAL GAZETTE.

The customs tariff law, as passed by the imperial Parliament, has been published in the Official Gazette. It divides articles imported into three classes—(1) dutiable, (2) free of duty, and (3) prohibited for importation. Articles for the use of the imperial family; arms, powder, and explosives imported by the army and navy, ships and boats for the navy, articles for the use of foreign ministers to Japan, medals and decorations, archives and other documents, samples of merchandise, personal effects of travelers, articles to be permanently exhibited in official or private museums; home produce, other than tobacco and liquors, reimported within five years in the condition in which they had been exported; articles exported for repairs and reimported, are included among articles free of duty. Articles temporarily imported for repairs, for the use of scientific investigators or travelers, for experimental purposes, for use as samples by merchants, manufacturers, or traders traveling for the purpose of obtaining orders, or for show and performance purposes are also free of duty, when they are to be reexported within six months; it being, however, required of the importer to guaranty such reexportation by depositing a sum equal to the import duties of such articles or security in some other form. Below is the tariff annexed to the law.

CLASS I—DUTIABLE.

Section I.—Arms, clocks, scientific apparatus, and machinery.

	Ad valorem, per cent.
(1) Cannon, muskets, revolvers, swords, cannon balls, powder, and all arms and munitions of war.....	25
(2) Balances and scales.....	10
(3) Barometers	10
(4) Opera or field glasses:	
(*a*) Leathered or lacquered..	15
(*b*) All others	20
(5) Clocks and parts of.....	20

	Ad valorem, per cent.
(6) Compasses, clocks, and parts of (for mariners' use)	10
(7) Crucibles (all sorts)	10
(8) Cutlery (other than mentioned elsewhere)	20
(9) Diving apparatus and parts of	10
(10) Electric-light machinery and parts of	10
(11) Fire engines and parts of	10
(12) Agricultural and mechanical implements and parts of	5
(13) Musical instruments and fittings of	15
(14) Chemical, drawing, surveying, surgical, and other scientific instruments (other than mentioned elsewhere)	10
(15) Photographic instruments and parts of	15
(16) Railway engine cars and parts of	10
(17) All other machinery and instruments (other than mentioned elsewhere)	10
(18) Microscopes and parts of	10
(19) Phonographs and parts of	25
(20) Pumps and parts of	10
(21) Sewing machinery and parts of	10
(22) Spectacles and parts of	10
(23) Fowling pieces and fittings of	25
(24) Boilers, engines, and parts of	10
(25) Telephonic machinery and parts of	10
(26) Telescopes	10
(27) Thermometers	10
(28) Typewriters	10
(29) Watches, cases, and fittings of:	
(*a*) Made of gold or platinum	30
(*b*) Made of silver and other sorts	25
(30) Watch machinery and parts of	15
Section II.—Beverages and provisions.	
(31) All beverages not containing alcohol, such as mineral, lemonade, or soda water	10
(32) Biscuits:	
(*a*) Ship's biscuits	10
(*b*) Sweet biscuits	15
(33) Butter	15
(34) Cheese	15
(35) Coffee	20
(36) Confectioneries and preserves	25
(37) Fresh eggs	10
(38) Flour of all kinds	10
(39) Fresh and dried fruits and corn (other than mentioned elsewhere)	15
(40) Ham and bacon	15
(41) Fresh meat	10
(42) Condensed or dessicated milk	15
(43) Pepper	15
(44) Salt (marine or mineral, irrespective):	
(*a*) Crude	10
(*b*) Refined	15
(45) Salted fish	15
(46) Salted meat	10
(47) Kantengusa or tokorotengusa	10
(48) Tea	25
(49) Vegetables (green, dry, or salted)	10
(50) All other provisions	15
Section III.—Clothing and apparel.	
(51) Boots and shoes	20
(52) Braces and suspenders:	
(*a*) Made of or mixed with silk	25
(*b*) All other sorts	20
(53) Buttons (other than ornamental buttons)	20
(54) Comforters and tippets:	
(*a*) Made of or mixed with silk	25
(*b*) All other sorts	20
(55) Gloves (all sorts)	20
(56) Hats, caps, etc:	
(*a*) Inlaid with gold, silver, or precious stones	30
(*b*) Made of or mixed with silk	25
(*c*) All other sorts	20
(57) Neckties:	
(*a*) Made of or mixed with silk	25
(*b*) All other sorts	20
(58) Shawls:	
(*a*) Woolen and embroidered or made of or mixed with silk	25
(*b*) All other sorts	20
(59) Shirts	20

	Ad valorem, per cent.
(60) Socks and stockings, merino work, irrespective of sizes:	
(*a*) Made of cotton or wool or mixed with both ...	20
(*b*) Made of or mixed with silk.....	25
(*c*) All other sorts.....	20
(61) Ornamental buttons (studs and solitaires):	
(*a*) Made of gold or platinum (either inlaid or not with precious stones).....	30
(*b*) All other sorts.....	25
(62) Trimmings (ribbons, laces, tassels, knots, metallic threads or ribbons, etc.), not mentioned elsewhere:	
(*a*) Made of or mixed with gold or silver.....	30
(*b*) Made of or mixed with silk.....	25
(*c*) All other sorts.....	20
(63) Underwear (merino):	
(*a*) Made of or mixed with cotton or wool.....	20
(*b*) Made of or mixed with silk.....	25
(*c*) All other sorts.....	20
(64) Waterproof coats:	
(*a*) Made of or mixed with silk.....	25
(*b*) All other sorts.....	20
(65) All other clothing and apparel:	
(*a*) Made of or mixed with silk.....	25
(*b*) All other sorts.....	20

Section IV.—Drugs, chemicals, and medicines.

Under this head, seventy-one articles—No. 66 to No. 136—are mentioned, the rates being 10 per cent, except for alcohol and musk, natural and artificial, on which are imposed duties of 40 and 15 per cent, respectively.

Section V.—Dyes and paints.

Under this head thirty articles—No. 137 to No. 166—are mentioned, the rates being 10 per cent, except for gold, silver, and platinum fluids, on which are imposed duties of 15 per cent.

	Ad valorem, per cent.
Section VI.—Glass and glassware.	
(167) Window glass (ordinary):	
(*a*) Uncolored and unstained.....	10
(*b*) All other sorts.....	15
(168) Plate glass (either quicksilvered or not)	20
(169) Glass beads (Venice beads).....	20
(170) Broken or powdered glass.....	5
(171) Looking glasses	25
(172) All other glassware (other than mentioned elsewhere).....	20
Section VII.—Grain and seeds.	
(173) Barley.....	5
(174) Beans, pease, and pulse.....	5
(175) Indian corn	5
(176) Oats.....	5
(177) Sesame	5
(178) Wheat.....	5
(179) All other grain and seeds (other than mentioned elsewhere)..	5
Section VIII.—Horns, ivory, skins, hair, shells, etc.	
(180) Animal bones.....	5
(181) Feathers (all sorts).....	25
(182) Furs.....	25
(183) Animal hair (wool and camel hair excepted)	5
(184) Human hair.....	20
(185) Buffalo and cow hides (raw, dry, or salted and not dressed).....	5
(186) Deerskins (raw, dry, or salted and not dressed.....	5
(187) Samba skins (raw, dry, or salted and not dressed).....	5
(188) Hoofs.....	5
(189) Cow and buffalo horns.....	5
(190) Deer horns.....	5
(191) Rhinoceros horns.....	10
(192) Elephants' teeth.....	10
(193) Elephants' teeth, waste.....	10
(194) Narwhals' teeth.....	10
(195) Sea horses' teeth.....	10
(196) Sole leather.....	15
(197) All other sorts of leather.....	15
(198) Tortoise shells.....	15
(199) Tortoise shells, waste.....	15
(200) All other sorts of bones, horns, skins, and shells.....	5
(201) All other sorts of animal teeth.	10

	Ad valorem, per cent.
Section IX.—Metals and manufactures of.	
(202) Antimony (block and ingot)...	5
Brass:	
(203) Bars, rods, and plates.....	10
(204) Pipes and tubes.....	10
(205) Screw nails.....	10
(206) Old brass (for recasting)...	5
Copper:	
(207) Block and ingot.....	5
(208) Bars, rods, and plates.....	10
(209) Nails.....	10
(210) Pipes and tubes.....	10
(211) Wires.....	10
(212) Copper and nickel coins...	5
(213) Old copper (for recasting).	5
(214) German silver (plates, rods, and wires).....	10
Iron and mild steel:	
(215) Pig iron and ingot.....	5
(216) Sheathing iron and steel..	5
(217) Bars, rods, hoops, and bands.....	10
(218) T, angle, and other similar wrought iron and mild steel.....	10
(219) Rails and accessory bolt and nut screws, chairs, dog spikes, fish plates, etc.....	10
(220) Plates (corrugated or otherwise).....	10
(221) Galvanized plates (corrugated or otherwise).....	10
(222) Figured plates.....	10
(223) Pipes and tubes.....	10
(224) Nails (galvanized or not, other than mentioned elsewhere)	10
(225) Screws, nuts, and bolts (other than mentioned elsewhere)	10
(226) Tin plates, iron or steel (plain or crystallized)...	10
(227) Wires and small rods not exceeding one-fourth of an inch in diameter.....	10
(228) Telegraph wires (galvanized).....	10
(229) Wire ropes (galvanized or not).....	10
Iron and mild steel—Continued.	
(230) Old wire ropes (galvanized or not).....	5
(231) Old hoops and wires and other sorts of old iron or mild steel (for recasting).	5
Lead:	
(232) Pig and ingot.....	5
(233) Plates	10
(234) Pipes and tubes.....	10
(235) Mercury	5
(236) Nickel.....	5
Platinum:	
(237) Block.....	5
(238) Bars, rods, and wires.....	10
(239) Solder (all sorts).....	5
Steel (other than mild steel):	
(240) Block.....	5
(241) Bars, rods, and plates.....	10
(242) Pipes and tubes.....	10
(243) Wires and small rods not exceeding one-fourth of an inch in diameter.....	10
(244) Wires for umbrella ribs...	10
(245) Wire ropes (galvanized or not).....	10
(246) Old files and other old steel (for recasting).....	5
Tin:	
(247) Block and ingot.....	5
(248) Plates	10
(249) Babbitt metal.....	5
Yellow metal:	
(250) Plates	10
(251) Bars and rods.....	10
(252) Nails.....	10
(253) Pipes and tubes.....	10
(254) Old yellow metal (for recasting).....	5
Zinc:	
(255) Block and ingot.....	5
(256) Plates	10
(257) Old plates and other old zinc (for recasting).....	5
(258) Nails and screws, other than mentioned elsewhere.....	10
(259) Anchors and anchor chains (old or new).....	10
(260) Metal fittings for handbags....	15
(261) Capsules.....	15

	Ad valorem, per cent.
(262) Iron chains other than mentioned elsewhere	15
(263) Door chains, door handles, and hinges	15
(264) Gold, silver, and other metallic leaves and dust	35
(265) Gold and silver ware other than mentioned elsewhere	15
(266) Electroplated ware other than mentioned elsewhere	25
(267) Grates, stoves, and accessories	20
(268) Safes	20
(269) Umbrella ribs and accessories	15
(270) Metals not mentioned elsewhere	5
(271) Metallic ware not mentioned elsewhere	20
Section X.—Oil and wax.	
(272) Candles	15
(273) Volatile oil	10
(274) Bean or pea oil	10
(275) Castor oil	10
(276) Cocoanut oil	10
(277) Groundnut oil	10
(278) Kerosene oil	10
(279) Linseed oil	10
(280) Olive oil	10
(281) Palm oil	10
(282) Paraffin oil	10
(283) Spirit of turpentine	10
(284) Honey wax	10
(285) Paraffin wax	10
(286) Other sorts of oil and wax	10
Section XI.—Papers and stationeries.	
(287) Albums	25
(288) Note books and forms	15
(289) Ink (printing, writing, copying, or lithographic)	15
(290) Chinese papers	15
(291) Wall papers	15
(292) Printing papers	15
(293) Other sorts of paper	15
(294) Pencils:	
(*a*) Made of gold or platinum	30
(*b*) All other sorts	15
(295) Pens:	
(*a*) Made of gold	30
(*b*) All other sorts	15
(296) Sealing wax	15
(297) Straw paper	15
(298) All other stationeries	15
Section XII.—Sugar.	
(299) Sugar, ordinary	5
(300) Loaf, lump, etc	20
(301) Rock candy	25
(302) Molasses	10
(303) Sirup	10
Section XIII.—Textile fabrics, yarns, threads, and raw materials thereof.	
Part 1.	
(304) Cotton yarns	10
(305) Cotton threads	15
(306) Cotton fabrics for bookbinding purposes	15
(307) Cotton damasks	15
(308) Cotton drills	15
(309) Cotton ducks	15
(310) Printed cottons	15
(311) Cotton satins, brocades, italian cloths, and figured shirtings	15
(312) Cotton velvets	15
(313) Ginghams	15
(314) Gray shirtings	15
(315) White shirtings	15
(316) Twilled shirtings	15
(317) Dyed shirtings	15
(318) Taffachelasses	15
(319) T cloths	15
(320) Turkey reds	15
(321) Victoria lawns	15
(322) All other cotton piece goods (either wholly of cotton or mixed with other material, cotton, however, predominating in weight)	15
Part 2.	
(323) Woolen and worsted yarns	10
(324) Alpacas	15
(325) Balzarines	15
(326) Buntings	15
(327) Camlets, lastings, etc	15
(328) Camlet cords	15
(329) China figures	15
(330) Flannels (wholly of wool or mixed with cotton)	15
(331) Italian cloths	15
(332) Long ells	15
(333) Mousseline de laine (wholly of wool or mixed with cotton)	15

	Ad valorem, per cent.
(334) Orleans and lusters	15
(335) Serges	15
(336) Spanish stripes	15
(337) Woolen cloths (all sorts)	15
(338) Woolen damasks	15
(339) Woolen felts	15
(340) All other sorts of woolen piece goods (wholly of wool or mixed with other material, wool, however, predominating in weight)	15
Part 3.	
(341) Raw silk, waste silk, etc	15
(342) Floss silk	15
(343) Silk yarns (spun), pure or mixed	15
(344) Silk threads (other than mentioned elsewhere)	20
(345) Chinese crapes	20
(346) Chinese pongee	20
(347) Chinese silk satins	20
(348) Chinese figured silk satins	20
(349) Satins mixed with cotton and silk	20
(350) Embroidered piece goods, wholly of silk or mixed with cotton	25
(351) All other sorts of silk piece goods (wholly of silk or mixed with cotton, silk, however, predominating in weight)	20
Part 4.	
(352) Flax and hemp yarns	10
(353) Flax and hemp threads	15
(354) Canvas	15
(355) Linen (gray, white, dyed, or printed)	15
(356) Flax or hemp damasks	15
(357) All other sorts of flax or hemp piece goods (wholly of flax or hemp or mixed with other material, flax or hemp, however, predominating in weight)	15
(358) Blankets (single or joined)	15
(359) Brussels carpets	20
(360) Felt carpets	20
(361) Hemp or jute carpets	20
(362) Patent tapestries	20
(363) All other sorts of carpets	20
(364) Chikufu	15
(365) Curtains:	
(*a*) Made of or mixed with silk	25
(*b*) All other sorts	20
(366) Elastic webbings:	
(*a*) Mixed with silk	20
(*b*) All other sorts	15
(367) Elastic ribbons, strings, etc	15
(368) Handkerchiefs:	
(*a*) Made of cotton, flax, or hemp, or mixture of them (joined or single)	15
(*b*) Silk and lace handkerchiefs	25
(369) Mosquito nettings (all sorts)	20
(370) Leather cloths (for use as furniture)	15
(371) Oilcloths and linoleum	15
(372) Table cloths:	
(*a*) Made of or mixed with silk	25
(*b*) All other sorts	20
(373) Towels (single or joined)	15
(374) Traveling rugs (single or joined):	
(*a*) Mixed with silk	25
(*b*) All other sorts	15
(375) Cotton, flax, hemp, or jute threads	10
(376) Yarns and threads (other than mentioned elsewhere)	15
(377) All other sorts of cloths	15
(378) All other manufactures of textile fabrics:	
(*a*) Made of or mixed with silk	25
(*b*) All other sorts	20
Section XIV.—Tobaccos.	
(379) Cigars	40
(380) Cigarettes	40
(381) Snuffs	40
(382) Cut	40
(383) Leaves	35
(384) All other manufactures of tobacco	40
Section XV.—Liquors.	
(385) Beer, ale, stout, and porter	25
(386) Brandy	40

	Ad valorem, per cent.
(387) Champagne	35
(388) Chinese liquors (all sorts)	40
(389) Gin	40
(390) Liqueur (all sorts)	40
(391) Port	35
(392) Rum	40
(393) Sake (similar to home produce)	40
(394) Sherry	35
(395) Vermouth	35
(396) Whisky	40
(397) Wine (red or white)	35
(398) All other distilled liquors	40
(399) All other brewed liquors	35
Section XVI.—Miscellaneous.	
(400) Aloes wood	10
(401) Amber:	
(*a*) Unworked	10
(*b*) Worked	20
Animals:	
(402) Cattle, horses, donkeys, asses, sheep, goats, and fowls	5
(403) All other animals	10
(404) Asbestos (plates)	10
(405) Bamboo (unworked)	5
(406) Leather bands, caoutchouc bands, canvas, india-rubber tubes, and canvas hose (for machinery use)	10
(407) Billiard tables and accessories	30
(408) Blasting, gelatin, other similar explosives, detonator and fuse	15
(409) Bricks and tiles (for building purposes)	10
(410) Brushes and brooms	20
(411) Sticks and whips	20
(412) India rubber and gutta-percha:	
(*a*) Raw	5
(*b*) Sheets	10
(*c*) Worked (other than mentioned elsewhere)	20
(413) Carriages, cycles, and parts thereof	25
(414) Railway carriages and parts thereof	10
(415) Railway wagons and parts thereof	10
(416) Tram cars and parts thereof	10
(417) Drays	10
(418) Celluloid:	
(*a*) Sheets or rods	10
(*b*) Worked	20
(419) Portland cement	5
(420) Chalk and whiting	5
(421) Charcoal and bone black	5
(422) Clay (all kinds)	5
(423) Coal	15
(424) Coke	15
(425) Coral (worked or otherwise)	30
(426) Hemp ropes (for rigging or otherwise)	10
(427) Cork-tree bark	5
(428) Corks	10
(429) Glass cutters	10
(430) Dynamite	15
(431) Emery	5
(432) Emery papers and cloths	5
(433) Emery and other whetstones	5
(434) Felt (for ship or roofing)	10
(435) Fireworks (all sorts)	30
(436) Fishing gut	5
(437) Flints	5
(438) Artificial flowers	25
(439) Picture frames and beadings	20
(440) Funori	5
(441) Furniture (old or new, other than mentioned elsewhere)	20
(442) Tennis, cricket, chess, and other sporting apparatus (other than mentioned elsewhere)	25
(443) Glue (ordinary)	5
(444) Gun cotton	15
(445) Powder (all sorts)	15
(446) Gypsum	5
(447) Fodder	5
(448) Ivory, manufactures of (other than mentioned elsewhere)	20
(449) Gold and silver ware (either inlaid with precious stones, pearls, etc., or not)	35
(450) Imitation gold or silver ware (inlaid with precious stones, pearls, etc., or not)	30
(451) Labels (for bottles, tins, etc.)	15
(452) Lamps, lanterns, and parts of	20
(453) Lard and tallow	10
(454) Leather manufactures (other than mentioned elsewhere)	20

	Ad valorem, per cent.
(455) Malt	5
(456) Matches (all sorts)	20
(457) Chinese mattings (40 yards per roll)	20
(458) Cocoa mattings	20
(459) Mats for floor (all kinds)	20
(460) Mica, sheets	10
(461) Oakum	5
(462) Packing (for steam engines)	10
(463) Oil paint, water color, lithographic and colored lithographic pictures, photographs, caligraphs, and other pictures and writings not mentioned elsewhere	25
(464) Asphalt, wood, or coal tar	5
(465) Plaster of paris	5
(466) Cards (all sorts)	35
(467) Graphite	5
(468) Porcelain and earthen ware (other than mentioned elsewhere)	20
(469) Precious stones and pearls	35
(470) Imitation precious stones and pearls	30
(471) Pulp for paper making	5
(472) Putty	5
(473) Rattans (either split or entire)	5
(474) Saddlery	25
(475) Sandalwood	10
(476) Shoe blacking (all sorts)	20
(477) Smoking apparatus (those for opium smoking excepted)	30
(478) Soap:	
(*a*) Toilet	20
(*b*) All other sorts	10
(479) Soapstone (block or powder)	5
(480) Spaltery (?), for hat making	10
(481) Sponges	5
(482) Stones:	
(*a*) Those for building purposes, and other blocks, unworked	5
(*b*) Those for ornamental or house-furnishing purposes, and other blocks, worked	20
(*c*) Sculptures and engravings	10
(483) Submarine and underground cables	10
(484) Rosetta wood	5
(485) Teak wood	5
(486) Wood and planks (other than mentioned elsewhere)	5
(487) Toilet boxes	25
(488) Perfumed water, hair oil, tooth powder, and other cosmetics and perfumeries	30
(489) Tortoise-shell manufactures	25
(490) Toys (all sorts)	25
(491) Trunks, handbags, purses, etc.	20
(492) Umbrellas:	
(*a*) Made of or mixed with silk	25
(*b*) All other sorts	20
(493) Umbrella handles and sticks (those made of gold or silver excepted)	20
(494) Steamers, sailing vessels, and other ships and boats	5
(495) Rosetta and ebony ware	25
(496) Raw, crude, or unmanufactured material not enumerated	10
(497) Manufactured or half-manufactured articles not enumerated	20

CLASS II.—FREE OF DUTY.

(498) Writings and pictures for advertisements, and signboards.
(499) Bone ashes.
(500) Maps, charts, and other scientific drawings.
(501) Bank notes, coupons, share bonds, and other value-bearing notes.
(502) Books, penmanship and drawing copy books, newspapers, and magazines.
(503) Gold and silver bullion.
(504) Cocoons (all sorts).
(505) Gold and silver coins.
(506) Old cotton.
(507) Ginned cotton.
(508) Raw cotton.
(509) Waste cotton.
(510) Waste cotton yarns.
(511) Hemp (carded or not).
(512) Guano.
(513) Gunny bags (old or new).
(514) Gunny cloth.

(515) Packing mats.
(516) Models and drafts.
(517) Oil cakes.
(518) Opium for medicinal purposes (imported by the Government).
(519) Plants, sprouts, and roots.
(520) Rice and husked rice.
(521) Dried sardines.
(522) Tea baskets, tea sieves, and tea winnowers.
(523) Tea pans.
(524) Tea lead.
(525) Wool, goat hair, and camel hair (old or new).

CLASS III.—PROHIBITED FROM IMPORTATION.

(526) Drugs, chemicals, medicines, beverages, and provisions of impure nature, to be regarded injurious under laws and orders.
(527) Opium-smoking apparatus.
(528) Articles to be regarded as injurious to the public health or to animals and plants under laws and orders.
(529) Articles infringing the law of the Empire relating to patent designs, trade-marks, and copyrights.
(530) Counterfeit money or imitation money to be regarded as counterfeit.
(531) Opium (opium for medicinal purposes imported by the Government excepted).
(532) Books, pictures, sculptures, engravings, etc., injurious to the public peace or morality.

It is provided that some of the items given in the above tariff may be altered to specific duties based on average prices of six months or more. The date of the enforcement of the tariff law is to be fixed by an imperial ordinance.

DROUGHT IN AUSTRALIA.

Droughts in Australia are not uncommon. In the most valuable and productive districts, they occur too frequently for the happiness of the inhabitants of this, in many ways, favored land; but the drought from which the country is now suffering is the most severe, prolonged, disastrous, and far-reaching of any visitation of the kind experienced for half a century, Save along the coast and a few favored spots not far inside of the "coast range," the present drought spreads well-nigh over the continental colonies.

As published in a former report, the colony of New South Wales alone lost 9,000,000 sheep during the year 1895, the number being reduced from 56,000,000 to 47,000,000 through the severity of the prolonged drought, while most of the other colonies suffered enormously from the same cause.

The baleful results of the present drought are intensified by the fact that this may almost be said to be but a continuation of the drought of 1895, as for fully two and a half years there has not been sufficient rainfall in the interior to be considered as a break in the almost changeless dry spell.

In the chief wool-growing colony (New South Wales), not only was there a failure to recover the losses of 1895, but many well-informed

persons claim that there had been a further decline during the year 1896.

From the extensive pastoral districts of the interior come reports of the most appalling conditions. During the hot summer months in Australia—December, January, and February—the pastures are dry and the grass dead; but in autumn there are usually rains which cause a fine growth of herbage for the winter months. At this time of year, the feed should be fresh, green, and abundant throughout the whole interior, while, as a fact, throughout the main sheep districts there has been very little rain for many months; in some localities, for almost a year.

From the very nature of its superficial configuration, continental Australia has but a scant rainfall and, owing to the same natural causes, it is very unequally distributed. If the total annual rainfall of the whole Australian continent were equally distributed over the entire area, it is doubtful if it would aggregate as much as 6 inches. The reasons are obvious. Owing to the rotary motion of the globe, the rain clouds, or vapor-laden atmosphere, come chiefly from the eastern seas or basins of evaporation. In every quarter of the globe, the distribution of the rainfall depends upon local influences, chiefly upon mountain chains or land elevations. Some 50 or 100 miles from the coast, and almost parallel therewith, a chain of mountains, or high table-lands, runs along the whole east side of the continent, from about 12° to 38° south latitude, having a total length of nearly 1,500 miles.

While these ranges are low (they average 4,000 or 5,000 feet) as compared with the great mountain chains of other countries, they are sufficiently high to empty the westerly moving rain clouds of most of their rather meager supply of moisture.

In a comparatively small area, east of some of the higher portions of this range, there is quite a heavy rainfall. There is also a district in tropical Australia, west of the Gulf of Carpentaria and north of the Raper River, embracing some 30,000 square miles, having an annual rainfall of from 40 to 50 inches.

A semicircular belt of country, some 400 miles wide and over 2,000 miles long, lying west of the above-mentioned coast range and south of the north shore line, has an average annual precipitation of from 10 to 30 inches, the amount gradually decreasing to 5 inches and less toward the interior. Fully one-half of the vast interior of the continent of Australia, a country with a superficial area of nearly 1,500,000 square miles, may be said to be almost rainless.

The enormous pastoral industry and the princely sheep runs—called in Australian speech "stations"—are inside the mountain range and reach out to the dry and withered plains in the semicir-

cular belt with the scant rainfall before described. As it will be observed that the highest average rainfall in any of these interior regions is but a few inches, the loss and distress in a country usually stocked up to the possibilities of the most favorable seasons, caused by the failure of the meager supply of rain, may be easily imagined. Inside of this coast range, in the continental interior and bordering on the dry and rainless plains, are pastured the 100,000,000 sheep and most of the 10,000,000 cattle of Australia.

New South Wales is the wool-growing country of Australia, as over one-half of the flocks of the Australian continent are in this colony. In 1891, there were 62,000,000 sheep in New South Wales alone. But prices began to decline and seasons began to fail, so that at the beginning of the wool season of 1895–96 the number had decreased to 56,000,000. In 1895, came a severe drought, and, as before said, New South Wales in that season lost 9,000,000 sheep, leaving her but 47,000,000.

Now, while 1896 was a better year than 1895, it is doubtful if the numbers more than held their own; it is even doubtful if there were more than 45,000,000 sheep in New South Wales at the beginning of the 1896–97 season. But never, it is said, has the outlook for the sheep raisers been more gloomy than now.

Owing to the enormous development of the artesian-well system, the extensive colony of Queensland has suffered proportionately much less than the other continental colonies. From all parts of South and Western Australia, from Victoria and New South Wales, the reports are disheartening. The feed has been dry and dead so long, and the water has become so nearly exhausted and so poor, that stock is dying by the hundreds of thousands, or even by the millions. Thousands of men are being employed in the various districts cutting the boughs of the apple, the oak, and other trees for food for the starving sheep, and in skinning the animals that perish in the mud at the failing water holes. Autumn and the lambing season has come, and since there is no fresh, wholesome food to nourish the breeding ewes, they are too weak to furnish milk, and the lambs are either killed by the owners to save the mothers' lives or allowed to die with them.

That I might see for myself, I took a hasty run 400 miles southwest into the famous Riverina district, whence comes the fine wools bought by American manufacturers. It was the picture of desolation. For miles and miles not a blade of grass, not a green weed or sprig of vegetation could be seen. Sheep, cattle, birds, and rabbits were succumbing to the awful ravages of the drought. Some well-informed people have declared through the public press that New South Wales would lose one-half of her sheep and one-fourth of her

cattle during the season, even if relief came soon. Others, less pessimistic, though no better informed, estimate the loss at one-fourth. I asked the New South Wales stock inspector his opinion regarding the probable loss; he said the situation was "too deplorable to speculate upon," and he would only make estimates when sufficient facts were presented to justify them.

The wool year in Australia ends June 30. From the secretary of the Wool Sellers' Association, I learn that for the year ended June 30, 1895, there were shipped from the ports of Sydney and Newcastle, N. S. W., 755,769 bales; for the year ended June 30, 1896, 683,001 bales; and for the year ended June, 1897 (estimated), 687,000 bales, the average weight of bales being 350 pounds.

Owing to "tricks in the trade," these figures do not fully reveal the facts we would expect to find when the number of sheep sheared during each of these years is considered.

As before mentioned, there was a loss in the wool year of 1894–95 of 9,000,000 head of sheep in New South Wales, while the next year's fleece, from the reduced number, fell short of the former year but 72,768 bales. This was owing to the better season during 1895–96 and the consequent greatly increased weight of fleece. A very dry season always means a very light fleece. Well-informed wool dealers estimate a decline in the coming year's clip of at least 200,000 bales.

Recently, on one station in the interior, 45,000 well-bred sheep were killed that the pelts might be saved, and the following clipping from the Daily Telegraph of June 7 is but a sample of the reports from most of the stock centers of the continent:

MELBOURNE, *Sunday*.

Upwards of 50 per cent of the cattle and sheep in the Nhill district have died within the last few weeks through starvation, entailed by the prolonged drought. Chaff at Nhill is £6 12s. ($31.63) per ton. Generally, stock of all kinds in the district are in a deplorable condition. The water supply at Inglewood gave out last evening, and the town is now faced with a water famine. At Benalla, Charlton, and Pyramid Hill enormous mortality has occurred among the herds in consequence of the drought.

While it seems almost impracticable to feed flocks of sheep ranging from 50,000 to 300,000 head, many are striving to save their stock by feeding hay and chaff, lucerne (alfalfa) being purchased at £6 6s. (say $30) per ton.

I made a hasty tour of inspection some two weeks ago, covering some 1,500 miles of country. I have seen many well-informed squatters and I conclude, while the total losses will be enormous, and in certain districts equal to the highest estimates yet published, the evils are somewhat exaggerated. However, wool buyers need not be surprised to learn that fully one-fifth of the finest wool sheep on

the globe have perished from this widespread and long-protracted drought, and that the fleece of the new clip will be very light, through a marked absence of yolk.

Even in Queensland, notwithstanding her enormous efforts and splendid success in artesian boring, the flocks have declined. While in Brisbane (600 miles north of Sydney), I learned from the Agricultural Department that, in 1894, Queensland had 19,587,691 sheep; in 1895, 19,856,959; in 1896, 19,350,000; and this year there would be a decrease of nearly 1,000,000 head. In 1894, Queensland had 7,012,997 cattle; in 1895, 6,828,000; and in 1896, 6,520,000, while this year the number will decrease at least 300,000 head. Queensland is twelve times as large as the State of Iowa, with one-fifth of Iowa's population.

The meat export of Australia will probably be reduced one-third, while the grain imports are likely to be nearly as large as in 1895–96. The general trade must suffer depression until the country has time to recuperate. Owing to her wonderful resources and the energy of her people, recuperation will be very rapid when the long dry spell is once broken.

From the awful destruction of the recent drought, there may arise a real good, as the question of conserving the waters that rush down the Darling and its tributaries is being earnestly urged by many influential people, and the "artesian bore" promises to become a great factor in the productive energy of the continent.

It is not so much more rain or even more water that is needed in the eastern colonies of Australia, but a more scientific method of conserving and utilizing the waters available in nearly every portion of the leading pastoral districts.

While this report has been waiting the steamer, there have been heavy rains along the coast (7 inches in a single day at Sydney) and large districts in the interior have been favored with refreshing showers. However, there is but little evidence of a general break in the drought.

GEO. W. BELL,
Consul.

SYDNEY, *June 1, 1897.*

RICE-HULLING MACHINES IN MADAGASCAR.

As an impression seems to have got abroad, from the publication of the information contained in my report of February 18,* that I am personally interested either in the rice-hulling machine trade or in the rice crop of this island, and as certain letters received since said

*Published in CONSULAR REPORTS No. 200 (May, 1897), p. 156.

publication seem also to indicate a desire for further details as to the kind of machine adapted to the wants of these people, I would now ask the publication of the inclosed.

HINTS AS TO THE RICE-HULLING MACHINES NEEDED IN MADAGASCAR.

1. The kind of machine.

It ought not to exceed 50 to 100 pounds in weight; the lighter the better. It ought to be as compactly built as possible, and made so as to admit of being attached to the heads of posts set in the ground or to uprights. It ought to be constructed so as to work with the same revolution the hulling and winnowing devices.

The great desideratum is a machine for family use. A few machines of greater capacity can naturally be placed in the larger villages; but what is really wanted is a cheap machine—one that can be sold here at a profit at prices ranging from $5 to $25 each. I do not want to be understood as saying that higher-priced machines can not find a market here, but the actual need is, as before stated, for a family or household machine. It is also essential that the machine should be simply but strongly constructed. The parts ought to be capable of ready adjustment and removal for repairs and cleaning, and yet with a minimum of small pieces, etc., liable to be mislaid by careless handling.

All exposed metal parts ought to be galvanized, or at least painted. All parts made of metal should be of as light weight as is compatible with the work they are required to perform. The main object is to hull and winnow the rice. That the kernels of rice should be more or less broken in the process would not militate against the sale of the machine, as by the present manner of hulling and winnowing there is a very large proportion of broken rice.

It should always be borne in mind that, in the majority of cases, this machine will have to be carried on men's shoulders through a rugged country before reaching its final destination.

2. How to put it on the market.

No manufacturer must for a moment expect to find here parties willing to guaranty the sale of any number of machines. American cottons and petroleum are the only articles bought and sold here on an actual cash basis. All other goods are handled on credit terms ranging from ninety days to six months and longer.

To properly introduce and secure large sales for rice-hulling machines, a salesman having sufficient mechanical ability and knowledge to thoroughly master the most minute details of said machines ought to be sent out here as general agent, with privilege of establishing subagencies and depots where needed and to exhibit and

instruct the natives in the use of the machine offered for sale. He ought to have sufficient executive ability to select competent native or creole agents to act as distributing peddlers or salesmen.

All manner of advertising material is, in an instance of this kind, when it is intended to reach the native buyer, practically valueless and an actual waste of money. And yet the intelligence and adaptability of these natives is of such a character as to render them capable of comprehending and using such simple hand-power machines after they have once been shown how to work them.

If manufacturers of rice-hulling machines, such as I have described, are not willing to send out a practical man to introduce their machines, but would prefer to sell one or more sample machines, in the hope that the local need will in time create a market, they might send me illustrated pamphlets or circulars printed in the French language. I will cheerfully place them with parties likely to become interested in the introduction of the machines. I would not advise the sending of more than fifty to one hundred circulars or pamphlets.

EDW. TELFAIR WETTER,

TAMATAVE, *May 15, 1897.* *Consul.*

CHINA: TRADE IN HANKOW AND MINE REGULATIONS IN HUNAN.

I have the honor to inclose extracts clipped from the Shanghai Daily News in regard to trade in this consular district for the quarter ended December 31, 1896, and a translation of a proclamation in regard to the opening of mines in Hunan.

JACOB T. CHILD,

HANKOW, *April 3, 1897.* *Consul.*

THE CUSTOMS GAZETTE, OCTOBER-DECEMBER, 1896.

The real revenue at Hankow in the last quarter of 1896 showed an advance, the apparent falling off in the collection being due to the smaller balance of river-steamer and coast-trade deposits carried over. The apparent falling off was 4,000 taels ($3,120, taking the value of the haikwan tael on January 1, 1897), but as the decline in the balance of deposits was 18,000 taels ($14,040), there was really a net gain of 14,000 taels made under export duty and transit dues. The tonnage entered and cleared during the quarter was 231 vessels of 195,090 tons and 323 of 208,694 tons, against 236 of 190,345 tons and 446 of 210,711 tons, respectively. Of opium, 116 piculs (15,466 pounds) of Indian and 2,506 piculs (334,133 pounds) of Szechuen were imported, against 136 piculs of Indian and 5,035 piculs of Szechuen in 1895. The import of cotton piece goods showed a marked decline,

except in American drills, of which 51,408 pieces were taken, against 14,170 pieces in 1895 and 18,165 pieces in 1894. The comparative figures of cotton yarn were:

Description.	1896.		1895.
	Piculs.	*Pounds.*	*Piculs.*
English	4,451	593,466	3,291
Indian	58,645	7,819,333	77,631
Shanghai	4,431	590,800	.....

In woolens, with the exception of Spanish stripes, there was a general decline, which extended to metals, tin and copper excepted. Foreign sundries were generally less, except kerosene oil and sugar. In native sundries, there was a marked advance in raw cotton and a large decline in medicines. Exports were fairly maintained on the whole, with a large advance in brick tea. Of transit passes, 18,637 were issued, against 56,813 in 1895 and an average of about 11,000 for the two previous years. The treasure table shows an import of gold to the value of 37,520 taels ($29,265) and of silver to the value of 1,174,418 taels ($916,046), against an export of the same metals to the value of 12,050 taels and 294,420 taels, respectively.

In Kiukiang, there was a heavy decline under export duty, but the total collection looks much better than it really was, owing to an excess of 20,000 taels ($15,600) in the balance of river-steamer deposits. The tonnage entered and cleared was about 1 per cent larger than in 1895. Of opium, 684 piculs (91,200 pounds) of Indian and 26 piculs (3,466 pounds) of native were imported, against 742 piculs and 5 piculs, respectively, in the previous year. Cotton goods showed a general improvement, especially in English sheetings, while the comparative figures of cotton yarn were:

Description.	1896.		1895.
	Piculs.	*Pounds.*	*Piculs.*
English	261	35,800	258
Indian	15,939	2,125,200	8,716
Japanese	630	84,000	186
Shanghai	615	82,000	501

Woolens participated in the improvement, but there was a slight decline in metals, lead excepted. Foreign and native sundries kept up well, Russian kerosene oil showing a large advance. The chief feature to note in exports was the decline in black and green tea. Of transit passes, 2,576 were issued, against an average of over 3,000 for the three previous years. There were also issued 34 free-transit passes for Shanghai cotton manufactures. The treasure table shows an import of silver to the value of 240,405 taels ($185,716) and an export of the same metal to the value of 195,320 taels ($152,235).

THE OPENING OF MINES IN HUNAN.

The bureau of mines for the province of Hunan has recently issued a proclamation setting forth certain regulations for the opening of mines in that province. The following are the important regulations of the bureau:

Manner of opening mines.—(*a*) Where the Government have the chief superintendence of a mine and no shares are offered to the public, such mines will be

called "Government mines;" (*b*) where the public are invited to subscribe for shares, such mines will be styled "semiofficial mines," or "mines worked conjointly by Government and a syndicate or company;" (*c*) where application has been made by a syndicate or company for permission to open mines and the Government has no shares in such mines, they will be styled "mines supervised by the Government, but worked by a commercial company or syndicate."

In the case of Government mines and semiofficial mines, such mines will be managed by deputies appointed by the bureau of mines. Mines supervised by the Government, but worked by a commercial syndicate, will be managed by the syndicate alone, but arrangements will have to be made about the granting of permits for taking possession of the output of said mines, or deputies will be appointed to assess taxes on said output as well as levy duty on the smelting furnaces.

Output of mines.—When permission to open mines is applied for, specimen ores must be presented for examination. Mines yielding saltpeter, sulphur, antimony, bismuth, nickel, and gold ores are a monopoly of the Government. The bureau decides whether mines are to be worked as Government, semiofficial, or commercial mines under Government supervision.

Transport, sales, and prevention of smuggling.—The product of Government and semiofficial mines and those bought by the Government must be transported to the markets and sold. Whether the products are sent to the provincial capital or deposited in godowns, their sales are supervised by the bureau officers, and no one will be allowed to transport or sell the output without the knowledge of the bureau. To prevent smuggling, the likin stations keep strict watch, and ores that are the basis for illegal transactions are seized.

Assessment of duty and exemption from likin.—The output of all mines is subject to duty; but as at first there will probably not be a great demand, temporary exemption is granted. When the demand for the output has reached a proper mark, the usual duties will be demanded and the governor will notify the board of revenue, in order that record of the matter may be made. When all the mines are sufficiently prosperous to pay the duty, they will all be exempted from the payment of likin.

Bonuses.—When Government and semiofficial mines have a surplus over expenses after the first trial year, the board shall decide as to the amounts to be distributed among the following: Local charities, officials of receiving depots and of branch offices, excise men of the preventive service, owners of land where the mines are located, and military posts in the vicinity. In the case of commercial mines supervised by the Government, the officials are left to their own discretion in the payment of bonuses.

The following regulations affect Government and semiofficial mines:

Sites.—The bureau will appoint deputies to accompany the mining engineers in prospecting. Should quantities of good ore be found not interfered with by graves, cultivated fields, houses, etc., arrangements can be made for opening the mines. If the mine is important and foreign machinery is necessary, the regulations will be as follows: No private owner of property within a radius of 10 li (21,150 feet) will be allowed to sink shafts or bore on his own account. If the mines are small, requiring only manual labor, no owner within 3 li (6,345 feet) shall sink shafts or bore. The officers of the new mines shall select one fixed shaft as a radius of prohibition.

Furnaces.—A suitable site will be chosen in Ch'angsha (the provincial capital) to erect foreign furnaces for smelting ores, such as silver, copper, antimony, bismuth, nickel, etc. Coke, sulphur, saltpeter, and the like can be made and purified in furnaces built in the vicinity of the mines.

Further regulations for semiofficial mines are:

Shares.—The engineer will determine the size of the mine and recommend the capital necessary. The shares shall be equal to 50 Ch'angsha taels* each. The shares are divided into ten parts, of which the Government may hold three and the commercial shareholders seven, or the Government may hold four and the shareholders six, or the division may be equal. If it is necessary to extend the work or to add to the existing capital, the original shareholders will have the refusal of the new shares. If they do not take them, the shares will be put on the market.

Interest on shares.—A balance sheet of expenses, etc., of each mine will be issued by the bureau at the close of the year, when interest on Government and commercial capital will be paid at the rate of 8 per cent.

Commercial directors.—Privilege will be granted shareholders in mines for which public capital has been raised or which have been opened by syndicates with Government permission when the capital has been subscribed to choose a shareholder to represent them on the board of management.

Commercial mines under Government supervision are subject to the following regulations:

Mining sites.—Merchants having found a workable mine shall provide the necessary bondsmen, who shall ask permission from the bureau to work the mine, or the merchants can petition through the local authorities. If the bureau finds the men to be responsible, a deputy will investigate the site, and if it is found that it does not interfere with graves, cultivated fields, or houses, permission will be granted. If the site is on private property, the merchants have the option of leasing it; but if it is on Government ground, the site can be rented or the mine be made semiofficial in character.

Government permits.—When the bureau has granted its sanction, the representatives of the syndicate shall personally receive the permit to open from the bureau. A fee of 100 taels is due (except in case of coal mines). Mines extracting silver, copper, or galena will be allowed to erect smelting furnaces. When the output is large, a deputy shall reside at the mine. The governor will decide the amount of ground rent. The salaries of the deputy, the assistants at the mines, the wages and board of the military guards, and miscellaneous expenses, must not amount to over 100 taels a month. When mines of silver, copper, or galena are on a limited scale, it is advisable for the promoters to take specimen ores to the bureau before paying for a permit. The bureau will grant passes for the transportation of the ores after the mine is worked and will buy the ore after it is put on the market.

Ordinary coal mines worked by the people shall be allowed to continue the industry without a permit. But if foreign machinery is used or foreign furnaces erected, a permit must be obtained and the output will be taxed.

COFFEE IN NICARAGUA.

I send an article translated from the market review for the month of May, published by R. Samper & Co., in Paris, France, trusting that the subject may be of interest to coffee planters.

PAUL WIESIKE,

MANAGUA, *June 14, 1897.* *Consul.*

*The value of the Ch'angsha tael is not given; it is probably between 70 and 80 cents.

THE COFFEE MARKET.

Many people interested in the coffee trade have believed that the quotations could not reach a lower mark, and that we have reached a price that could be considered as the extreme limit from where the movement must be an advance. Relying upon this, several speculators and capitalists made operations, with the result of bettering for a few days the quotations of Santos good average on delivery. and the Brazilians, availing themselves of these favorable conditions, sold whatever quantity of their coffee they could. But these transactions did not influence the general market, for the Brazilians offered their coffee at the same time at a lower figure, and in this manner frustrated the efforts to create a favorable tendency.

It is evident that the crop of Brazil for the year 1896–97, with its 9,000,000 bags, is extraordinary, and one would be led to believe that the crop of the year 1897–98 would be much reduced in proportion and would counterbalance the excess of the last one, giving importers a chance to reestablish former prices; but if one considers that the high prices that have been paid have brought large revenues to the planters, it will appear natural that the planters should increase their plantations. The amount produced will increase annually even if climatic conditions are not favorable.

As the coffee planters in Central America, Venezuela, Colombia, and the other countries in which coffee is raised are proceeding in the same manner, we shall have every year greater importations than we can consume, even if the consumption should increase as it has done so far. This abundance, together with the surplus of years of large crops, will not allow the high prices at which the different grades of coffee have been sold in former years to be again established.

There is no fear that the plantations now in existence will be abandoned as long as they bring revenue to the proprietors, and it is certain that the present prices can go much lower before this possibility can occur. Therefore, it is logical to predict that the quotations will decline in proportion to the production and that the production will far exceed the consumption of the whole world.

It is a well-known fact that the crop in Brazil for the year 1897–98 will amount to about 7,500,000 bags, and from this it appears certain that the present prices will not be maintained and that still lower ones will prevail during the coming season.

The buyers who supply the consumers understand the situation and offer such low prices that one does not dare to accept them, although convinced that the situation might grow worse. This state of affairs causes the difficulty in selling and the progressive diminution of prices.

If the crisis we are now undergoing should arrest the heedless development of the cultivation of coffee and should lead to the abandonment of certain plantations, it would result to the advantage of most planters for the coming season; otherwise, it is impossible to foresee the final result of the grave disproportion between production and consumption.

GOVERNMENT CERTIFICATES IN NICARAGUA.

I send recently issued decrees concerning the adjudication and the determination of the price of public lands in Nicaragua.*

Many letters of inquiry reach this office from parties in the United States, the writers laboring under the impression that public lands

* These decrees were published in CONSULAR REPORTS No. 203 (August, 1897), in a report by Consul O'Hara, of San Juan del Norte, dated June 3, 1897.

in Nicaragua can be had for nothing, or as low as 10 cents per acre. The decrees will serve as a full reply to inquiring parties.

Further, I beg to give an explanation of the term "documents of the public credit legally liquidated and recognized," which appears in these decrees, as well as in other decrees concerning national loans, etc. An explanation of the term will also make clear to Americans the manner in which the Nicaraguan Government pays the premiums offered for planting rubber, coffee, cacao, and other trees, if the premiums are paid at all. In fact, but two cases are known here in which this Government has paid the premiums on trees, by means of scrip that, after an examination by the auditor, was exchanged for certificates of the public credit.

Documents of the public credit legally liquidated and recognized.—Any claim against the Government of Nicaragua, be it the result of damages or losses suffered during the revolutions, of forced or voluntary contributions, of premiums offered for the planting of coffee, rubber, cacao, or other trees—in fact, resulting from any source—is provisionally paid by a scrip, issued by the commanding officers of the prefectures of the respective departments (provinces). Such scrip is presented at the office of public credit, to be examined by the auditor, and, if found correct, a certificate is issued for the specified amount. These certificates, thus legally liquidated and recognized, are taken in payment by the Government in certain instances, such as in paying the one-third for public lands, at their face value. In commercial circles, they do not bring more than 15 to 20 per cent of their face value on account of the financial condition of the Nicaraguan Government and owing to the monetary crisis at the present time existing in this country.

PAUL WIESIKE,
Consul.

MANAGUA, *June 2, 1897.*

WOOD IN PARAGUAY.

The following report was prepared by the late Consul Thomé, of Asuncion. It was forwarded to the Department by Vice-Consul Eben M. Flagg after Mr. Thomé's death. It is in reply to an inquiry by the Big Horn Improvement Company, of Omaha, Nebr., and a copy was sent to the company.

Yours of November 20 received some time in January. It is the first letter of inquiry that suits this country and the lumber dealers here. Others make inquiry in regard to the price of timber and lumber in this country for the purpose of entering into negotiations for the sale of their own home products.

This country has wood of all kinds and does not want to import. What it wants is to manufacture its wood here on the ground into commercial shapes and supply the market from here to Buenos Ayres. I at once set about to find men that I thought would be of service to you. Mr. Stanley, who writes you at my request, has been in the log-cutting and transporting business a long time and knows all about the different kinds of timber. The timber industry of this country has greatly increased of late years, owing to the excellence of its wood. The hard woods of the country are used in Buenos Ayres not only for railway bridges and carriages, but also for sleepers. Orders are continually coming here from below for large contracts, but for want of machinery and capital dealers can not take them, and confine themselves to small contracts with neighboring towns on the river.

I see by the Buenos Ayres English paper that the great Southern Railway of Buenos Ayres has lately made a large contract with Australia for sleepers, simply because no one here has the facilities for turning out a large number of hard-wood sleepers in a given time. The forests abound in splendid woods, and their lasting powers, either in earth or water, have been proven over and over again. As an example, the Paraguayan Central Railway, built by Lopez fifty years ago, was the first railway line in South America. Many of the sleepers then put in, and constantly in service since, are now practically sound, and will be for years to come. The local consumption is small—probably 200 tons per month of all classes would supply the demand—but for export the quantity is unlimited.

Mr. Stanley is now sending to Bremen large quantities of cedar. The demand for this wood has been chiefly created by the war in Cuba, by which the Cuban supply has been cut off. It is sent away as timber—that is, roughly squared logs, ranging from 4 yards long upward, squaring 12 to 25 inches. It is sold in Asuncion at about 90 cents (gold) per vara of 34 English inches, 10 by 10 inches. As regards the hard woods, they can be both cut and bought very cheaply. Labor is very cheap. A peon is satisfied to make 12 cents (gold) per day, which is the present value of the paper dollar here. A "shift-all woodcutter," as we call them here, is well satisfied to make 1s. (24 cents) per day.

The freights on the railway are extremely light—for a distance of 40 or 50 miles, 25s. ($6.08) per 12 tons.

The hard woods can be brought to the railway at about 7 cents (native money) per vara, 10 by 10 inches. By hard woods, I mean lapacho, curupay, viraro, urunday, etc.

The best wood of the country is quebracho. This wood is now to be found only in the Paraguayan "chaco." There is a tremendous

demand for it, not only for railway sleepers, but also for its extract, which is used in tanning. The sleepers easily bring $1 (gold) each, put in at Buenos Ayres, which, after expenses are paid, leaves a profit of 36 cents (gold).

There is much money to be made in all classes of wood business here. Every one is poor, and mill owners, I know, are paying as much as 5 per cent per month and yet have something over. Losses all through the country have been caused by the immense decrease of the value of the paper dollar; but as long as you pay wages in paper and sell your products for gold, you make a very satisfactory return on your investment.

I would strongly advise you to make a trip to this country and see for yourself. It is a pleasant and instructive journey, and if you come at once you will be here in the pleasantest part of the year. The months of June, July, and August are the coolest.

Further information I will be glad to give you at any time.

SAMUEL W. THOMÉ,

ASUNCION, *March 15, 1897.* *Consul.*

CANADIAN BANKING SYSTEM.

Having made an investigation of the banking system of Canada, especially among the bankers and business men of Quebec, I am thoroughly convinced that the system is giving entire satisfaction to the whole community. It is pronounced by the best financiers to be almost perfect, and, as it is revised every ten years, amendments are continually being made, either correcting existing errors or creating new facilities. The following is a condensation of the banking act which was passed by Parliament in 1890 and will continue in force until 1901:

The capital stock of a bank must be $500,000 bona fide subscribed, divided into shares of $100 each.

The number of provisional directors is fixed at not less than five nor more than ten.

The paid-up capital must be $250,000, and shall be paid to the Minister of Finance. No notes can be issued or business conducted until the treasury board grants a certificate of authority. The necessary authority granted, the Minister of Finance pays back the amount of capital in his hands, less an amount held to represent the portion to be placed in the note circulation redemption fund.

A majority of the directors must be natural-born or naturalized subjects of the Queen. All officers are compelled to give guaranty bonds.

Upon a certificate being granted by the treasury board, the capital stock may be increased by by-law. For that purpose, application must be made within three months of passing the said by-law. The capital stock may be reduced by certificate from the treasury board, but reduction of the capital in no way lessens the

liability of shareholders. A penalty of 10 per cent may be levied upon amount of shares, in cases where there has been neglect or refusal to pay calls on shares. All directors are liable for declaring a bonus or dividend impairing paid-up capital. A dividend exceeding 8 per cent may be paid only when the reserve is equal to 30 per cent of paid-up capital. The penalty for holding less than 40 per cent of cash reserve in Dominion notes is $500. The total circulation shall at no time exceed the amount of unimpaired paid-up capital (except that of the Bank of British North America, which shall not exceed 75 per cent of such capital, unless by special additional deposit with the Minister of Finance). Notes of all banks are of the denomination of $5 and multiples thereof. The schedule of penalties for overissues is as follows: Excess $1,000 and under, the amount of excess; over $1,000 and not over $20,000, $1,000 penalty; over $20,000 and not over $100,000, $10,000 penalty; over $100,000 and not over $200,000, $50,000 penalty; over $200,000, $100,000 penalty.

Any officer of the bank pledging or assigning the bank notes may be fined not less than $400 nor more than $2,000, or imprisoned for two years, or both may be imposed. Any officer of the bank issuing notes with intent to deceive, as well as the party receiving the same with knowledge of such intent, shall be liable to imprisonment for seven years or a fine of $2,000.

In the case of insolvency, the notes issued by the bank and any interest payable thereon shall be the first charge. Penalties for which the bank may be liable are not a charge until all other liabilities are discharged.

Five per cent on the average note circulation must be set apart and held by the Government and designated "the bank circulation redemption fund."

Bank notes are payable at par throughout the Dominion, and all banks are bound to make arrangements for the redemption of their notes at certain specified centers of trade. For issuing any note intended to circulate as money by other than the banks to which the banking act applies, a penalty of $400 is levied, half of which goes to the person suing and half to the Government.

Officers in charge of public money, officers of banks, etc., must write or stamp on the face of altered or defaced bills "counterfeit," "altered," or "worthless." If an officer thus wrongfully stamps a note, he is obliged to redeem it at its face value.

For making or issuing an advertisement liable to deceive and be taken for Dominion notes, there is a penalty provided of $100 or three months' imprisonment, or both.

For neglecting to send monthly returns of previous months to the Minister of Finance within the first fifteen days of the current month, there is a penalty of $50 per day for each day so neglected. The post-mark on the envelope is held as sufficient proof. For neglecting or refusing to send special returns when called for by the Minister of Finance, within thirty days of date of call, the penalty is $500 per day. The post-mark on the envelope is proof thereof. There is also a penalty of $50 per day for neglecting, within the first twenty days of the new year, to send a list of the shareholders on the 31st of December. (The list of shareholders of all banks are published in an annual blue book issued by the Government.) For neglecting to send a statement of dividends remaining unpaid for more than five years, as well as balances of accounts in which no transactions have taken place or interest been paid thereon for five years (except money deposited for a fixed period), the penalty for each day is $50 until such return is received.

Any person using the title "bank," "banking company," "banking house," "banking association," or "banking institution" without authority is guilty of an offense against the banking act of the Dominion. The penalty for committing an offense against this act is a fine of $1,000 or imprisonment for five years, or both.

Public notice required to be given by this act, unless otherwise specified, may

be by advertisement in one or more newspapers of the place where the head office is situated, and in the Canada Gazette, the official organ of the Government. No discount or commission can be charged upon Government or departmental checks.

The act of 1890, which is the present banking law of Canada, repeals all former acts except cases pending and unsettled transactions which have taken place in compliance with and during the time former acts were operative.

The amount of Dominion notes issued and outstanding at any time may, by order of the council, founded on a report of the treasury board, be increased to, but not exceed, $25,000,000, by amounts not exceeding $1,000,000 at one time and not exceeding $4,000,000 in any one year; provided that the Minister of Finance and receiver-general shall always hold as security for the redemption of such notes issued and outstanding an amount in gold and Canadian securities, guarantied by the Government of the United Kingdom, equal to not less than 25 per cent of the amount of such notes, at least 15 per cent of the total amount of such notes being held in gold; and provided, also, that the Minister of Finance shall always hold for the redemption of such notes an amount equal to the remaining security. Five per cent of the total amount thereof shall be in Dominion debentures issued by authority of Parliament. Such notes are a legal tender in every part of Canada except at the offices at which they are respectively made payable. The proceeds thereof shall form part of the consolidated revenue fund of Canada, and the expenses lawfully incurred under this act are paid out of this fund.

The foregoing is a brief synopsis of the provisions of the Canadian bank act, which experience has proved to be perfectly adapted to the wants and requirements of the banking and business community.

A comparison of the banking system of the United States with the other prominent systems of the world, will reveal certain features in which the United States system differs from the others. In England, France, Germany, Scotland, and Canada, the banks are few in number, with large capital and branches, while the banks of the United States are numbered by thousands, have individually small capital, and no branches. In the five countries, the paper money is created almost altogether by the banks, and these are, of course, in constant touch with the business community.

In the United States, the paper money, by whatever name it may be known, is practically all created by the Government, which is not in immediate contact with the business community. These are differences of considerable importance, and are considered to be the cause of most of the present evils in the finances of the United States, and if the third quality possessed by the national banking system is added—that of legal reserves—we have the three most potent causes of high interest rates and panics.

The evils of the present United States national currency system were never more apparent than to-day, and the all-absorbing topic before the American people ought to be the question of providing a sound financial system.

A currency based upon securities or land can never respond to the demands of commerce. The bill holder is secured beyond a

doubt, but aside from this fact, the notes do not perform the service required save in a very limited way. The problem is to evolve a plan that will, first of all, be adapted to the surrounding conditions, and that will be likely to meet the approval of the law-making powers.

A brief glance at the Canadian system of currency is here in order.

Each chartered bank has the power to issue notes in denomination of $5 and multiples thereof for circulation as money, which they may not issue in excess of their unimpaired paid-up capital stock. These notes are redeemable at par at various points throughout the country. As a satisfactory guaranty for the protection of the public, these notes were, in 1880, made a first lien on the assets of any insolvent bank and claimed double liability of its stockholders. For further insuring prompt redemption of the notes of an insolvent bank, the "bank circulation redemption fund" was created. This fund has been contributed to by all the banks, in sums equal to 5 per cent of the average circulation of each during the twelve months preceding the 15th of July, 1892. Should this not be sufficient to meet the claims on it, the solvent banks must contribute to make good the deficiency by annual payments not exceeding 1 per cent of their average circulation. These provisions furnish a positive guaranty to the public that the notes of any chartered bank are certain of ultimate payment; in fact, as the bank circulation redemption fund provides that the notes of an insolvent bank bear interest at the rate of 6 per cent per annum from the day of suspension to the day of payment, they become a profitable investment and are sought for. As a matter of fact, when La Banque du Peuple recently suspended, its notes circulated next day as freely as ever.

The elasticity of the Canadian currency is shown by its adapting itself so perfectly to the trade and other requirements. The numerous branches of the thirty-seven banks, scattered from Prince Edward Island to the Pacific, dispense the notes of their respective banks in response to the needs of their customers, and as there is no inducement to hoard these notes, they find their way back, when no longer wanted, to the banks that issued them. It is a currency that ebbs and flows with the commercial tide—it responds automatically to commercial requirements, and is to be found whenever and wherever wanted. When its mission is performed, it returns to the seclusion of the bank vaults until another commercial event brings it forth.

PHILIP B. SPENCE,
Consul.

QUEBEC, *May 25, 1897.*

WHEAT HARVEST OF GERMANY AND HUNGARY.

The winter-wheat harvest is now in progress, and that of rye nearly finished, throughout southern Germany. From the most trustworthy information that can be obtained, the yield of both grains will be generally good in quality, but quite below the average in quantity. Official reports giving the condition of principal crops throughout the German Empire on the 15th of July have just been issued, and are succinctly as follows, it being understood that under the German system of crop notation, 1 indicates a full maximum yield, 2 fair, 3 scanty, 4 poor, and 5 a failure, the intermediate conditions being expressed in decimal fractions of the five classifying numbers.

The consolidated returns from the whole Empire at the date named gave the following averages: Winter wheat, 2.3; spring wheat, 2.7; winter rye, 2.4; spring rye, 2.7; barley, 2.7; oats, 3; potatoes, 2.7; clover and lucern, 2.6; hay and grass, 2.4. From the middle of June, more or less serious drought prevailed, particularly in North Germany, from which spring crops, especially grass, suffered considerable damage. Hailstorms did some injury to grapes and other growing crops in Hesse-Nassau, and, on the whole, southern Bavaria alone gives a wholly satisfactory report.

From Hungary, semiofficial, but trustworthy, advices indicate a still more unsatisfactory wheat harvest. From Budapest, it is reported that in consequence of excessive autumn rains and other causes, the area of winter wheat sown was 275,972 joch (393,252 acres) less than the acreage of the previous year, and that the excessive rainfall, being prolonged throughout the winter and far into the spring, inflicted serious injury upon the growing wheat.

As a result of this and the excessive heat of early and middle June, rust, sunburn, and other diseases attacked the growing wheat, so that not only the quantity of the yield, but the weight and substance of the grain, have been more or less seriously impaired. The net yield is now estimated at 25,000,000 meter centners (91,858,334 bushels), a decline of 13,000,000 meter centners (47,749,665 bushels) as compared with the crop of 1896. The deficit in weight is stated to be 4 kilograms per hectoliter (approximately 3 pounds per bushel) as compared to the wheat of last year's harvest.

As to rye, the outlook in Hungary is equally unpromising. Not only was the area of cultivation this year greatly diminished, but the total crop is estimated at only 8,000,000 meter centners (29,395,000 bushels), against 14,000,000 meter centners (51,440,667 bushels) last

year, while its weight is 3 kilograms per hectoliter (about 2 pounds per bushel) lighter than the rye of 1896.

In India, the wheat deficit is about 30 per cent of an average crop—that is, 78,393,000 bushels, against 101,243,400 bushels last year. As the normal home consumption of wheat in India is about 95,000,000 bushels, this leaves an actual deficit of 16,000,000 bushels, and makes any considerable export of wheat from that country impossible. The Russian wheat crop is roughly estimated at only 70 per cent of a normal harvest, and that of Roumania drops from 8,600,000 meter centners (31,599,267 bushels) in 1896 to less than half that quantity in 1897. Add to this the meager wheat surplus in Australia and Argentina, and it becomes evident that the United States, with its wheat crop of 550,000,000 bushels, will easily and surely dominate the market of the current cereal year.

FRANK H. MASON,
Consul-General.

FRANKFORT, *July 27, 1897.*

CONGRESS OF COMMERCE AND INDUSTRY AT BRUSSELS.

The Department of State has received a note from the Belgian chargé d'affaires, of which the following is a translation:

BELGIAN LEGATION,
Newport, August 13, 1897.

MR. SECRETARY OF STATE: I am instructed to notify Your Excellency that the Syndical Union of Brussels has decided to organize, during the exhibition now open in that city, an International Congress of Commerce and Industry, which will be held from the 6th to the 11th of September next.

I have the honor to inclose herewith to Your Excellency a copy of a circular relative to the congress in question.

I venture to call Your Excellency's attention to the importance of this congress, which has inserted in its programme questions relating especially to industrial property, commercial law, industrial labor, and transportation; and I have the honor, in the name of my Government, to invite the United States Government to have itself represented there by special delegates.

I am directed to inform Your Excellency, at the same time, of the importance attached by the organizations to having a certain amount of publicity given in the United States to the proposed assembly.

I avail myself, etc., MAURICE JOOSTENS.

INTERNATIONAL EXHIBITION AT BRUSSELS IN 1897,
SEPTEMBER 6–11, 1897,
INTERNATIONAL CONGRESS OF COMMERCE AND INDUSTRY, ETC.,
Brussels, July, 1897.

SIR: The International Exhibition of Brussels has occasioned the meeting of various congresses. Commerce and industry and the arts and sciences connected with them can not fail to seize this opportunity of discussing some of the principal

questions within their province, not only among citizens, but also with such foreigners as may honor our country with their presence.

The Syndical Union has undertaken to organize an International Congress of Commerce and Industry in the month of September next, under the honorary presidency of M. Nyssens, Minister of Industry and Labor, and with the kind cooperation of the commercial and industrial associations of Belgium.

You will find inclosed the programme of the questions proposed for examination by the congress, which relate to the following subjects: Industrial property, commercial law, political economy, industrial labor, international relations and transportation. Reports will be prepared upon each of the questions, and will be published in time to permit a useful and profitable discussion.

The importance of the International Congress of Commerce and Industry will not escape you. It could not be held at a more favorable time than during the exhibition of 1897.

We hope, therefore, that you will be pleased to respond to the appeal which we have the honor to address you, and that you will grant us your cooperation for the success of this work. You will find inclosed a bulletin of adhesion, which we request you to return after filling it up in due form.

Accept, sir, etc.,

THE COMMITTEE ON ORGANIZATION.
President, ——— ———.

CH. SPINNAEL,
President of the Syndical Union of Brussels.

[Followed by the names of the vice-presidents and secretaries.]

NOTICE.

The International Congress of Commerce and Industry of 1897 has as its object to furnish scientists, economists, engineers, lawyers, merchants, and manufacturers of all countries an opportunity of studying in common some of the chief problems arising from the commercial and industrial activity of our age.

Governments, public administrations, chambers of commerce, commercial and industrial associations, and syndical chambers, are especially invited to lend their cooperation to the congress, and to have themselves represented in it by delegates.

All persons who shall, within the proper time, send in their adhesion to the president of the Syndical Union and who shall pay the assessment of 20 francs are members of the congress.

The congress will meet in Brussels in the month of September, 1897. It will last six days—from Monday, the 6th, to Saturday, the 11th, of September. Monday and Saturday will be specially devoted to the opening and closing sessions of the congress. The sessions of Tuesday, Wednesday, Thursday, and Friday will be devoted, in the morning, to meetings of special sections; in the evening, to the general assemblies and united sections.

The congress is divided into five sections—(1) section of industrial property, (2) section of commercial law, (3) section of political economy, (4) section of industrial labor, (5) section of international relations and transportation.

All members may, at their choice, have themselves inscribed in one or more sections.

Each section discusses, with full liberty, the questions within its province.

At least one of the questions given to each section may be discussed in the general meeting—all the sections united.

All opinions may be freely expressed, subject to the personal responsibility of their advocates.

The members are urgently entreated to send to the president of the Syndical Union of Brussels, as soon as possible, the memoranda, notes, and documents relating to the questions which they may wish to discuss.

Reports will be prepared upon all the questions on the programme.

The papers will be printed, as well as the minutes of the deliberations of the congress.

QUESTIONS PROPOSED FOR EXAMINATION BY THE CONGRESS.

I.—Section of industrial property.

(1) Legislation with regard to patents; desirability of an international agreement.

Scope of international conventions with regard to patents for inventions and for imports.

Measures for the recognition of the right of priority, resulting from such convention.

Amendment of the provisions relating to the lapse of patents.

(2) Legislation with regard to industrial models and drawings; desirability of uniform legislation.

II.—Section of commercial law.

(1) Legislation with regard to corporations; desirability of an international agreement.

(2) International financial law: (*a*) Gambling in stocks, (*b*) loss or theft of securities payable to bearer, (*c*) organization of the professions of broker and stock broker, (*d*) tax upon securities payable to bearer.

(3) Execution of judgments rendered in a foreign country, especially in cases of bankruptcy.

III.—Section of political economy.

(1) The question of taxes.

(2) Cooperative societies; examination of the criticisms caused by the present legislation.

IV.—Section of industrial labor.

(1) Effects upon the condition of industry and commerce in the various countries which have legislated on these points: (*a*) Concerning insurance against accidents, sickness, disability, old age, stoppage of work; (*b*) concerning the regulation of Sunday labor and the limitation of working hours for adults.

(2) Minimum of wages in public adjudications.

(3) Effects of syndicates of employers and syndicates of workmen on the physical and moral condition of those syndicated and upon the development of the industry.

V.—Section of international relations and transportation.

(1) International tariffs of transportation; their lawfulness and their influence upon business.

(2) Admission of foreigners to public adjudications (awards of contracts).

(3) Investigation of the best means of developing merchant marines.

NOTES.

United States Trade with China.—Consul-General Jernigan wrote from Shanghai, April 16, 1897:

It is gratifying to report that the value of the trade between the United States and China during the year 1896 was the largest since trade relations were established between the two countries, and the most pleasing feature of the increase is credited to imports from the United States. Although the exports to the United States materially declined, the increase in imports was so marked as to make the aggregate value larger than for any previous year. About the first of the year, I sent a lengthy report to the Department on the "Trade and industries of China," in which was pointed out the lines on which our trade with China had increased and decreased.* The internal taxation of China and kindred subjects were referred to. The report was intended to answer many inquiries I have received from business men.

Machinery in Madagascar.—Consul Wetter sends from Tamatave, under date of May 13, 1897, the following letter, in answer to inquiries from the E. C. Austin Manufacturing Company, Chicago, Ill. The report was sent to that company June 25, 1897.

Your favor of March 22 duly to hand. Replying thereto, permit me to state categorically:

(1) There are many firms here who correspond in English, but for your line I would suggest that all catalogues and communications ought to be in the French language.

(2) No introduction of American machinery has yet occurred in this country. A pump or two, as many sewing machines, a very few hammers and other small tools (not a dozen all told), a small Enterprise hand mill, and one lawn mower would cover the entire introduction here of American machinery, tools, and implements in the last five years.

(3) I do not see any general prospect for the successful introduction of your machines, primarily because of the great difficulty you will have in overcoming the prejudices against foreign machinery in the French official mind. You will understand that for a long time to come the only works that will be possible in Madagascar will come under the heads of public works undertaken by the Govern-

* Printed in Commercial Relations, 1895-96, p. 773.

ment, works undertaken by concessionary corporations, and individual enterprises. Unless this country develops some valuable gold mines in the near future, its development will be very slow. You will read wonderful things in the newspapers, but actual progress will be at the minimum rate. There is certainly a large amount of work to be done in Madagascar—Government, corporative, and private—of a character to call for the use of your machines, but as to when that work will be undertaken is a question of the future.

(4) There are no American firms whatsoever introducing machines or machinery into this country.

(5) There are no native firms at all. There are certain French and Manistian-English and English firms engaged in general commerce here, but they deal only in hand-serving machines.

(6) The only public work at present going on in Madagascar, outside of some street leveling in the capital, is the cutting of connecting canals between a chain of lakes extending from this place down the coast to Andevoranto. I understand the contractor is E. Payet, of this place, and that the work is under the personal supervision of Mr. H. Palu, conducteur, chef du service des travaux publics, Tamatave. Both parties would have to be corresponded with in French.

In conclusion, I would add that goods coming in for public works would probably be duty free, while for private persons and corporations American machinery would probably pay the same duties as in France. As soon as I know of any possible chance for your line of goods to be introduced, I shall give prompt notification thereof to our manufacturers through the Department of State.

I regret that existing conditions do not warrant me in writing more encouragingly.

Flour in Madagascar.—In answer to a request by the Philadelphia Museums, Consul Wetter sends the following report from Tamatave, dated May 15, 1897. The original was transmitted to the Philadelphia Museums June 24, 1897.

Character and variety.—Bombay and Australian flour are the usual flours used here. Some French flour comes in, but is found too expensive for this market. The Bombay flour most generally sold is the superfine "Elephant" brand. The Australian flour is not sold under any particular brands, and French flour is branded "Minoterie Marseillaise."

Countries of origin, etc.—Australian and Bombay flours come here from Mauritius, hence names and addresses of manufacturers are unobtainable. French flours come in either for the use of the army or for individual traders, and, being bought through French com-

mission agents, the addresses and names of manufacturers are likewise unobtainable.

Quantity imported.—There are no official figures available as to the quantity and quality imported since June 30, 1894. For the six months ended that day, the import of flour into Madagascar from French, English, and German sources was 17,525 francs ($3,302) in value. Exclusive of flour imported for army use, the local consumption at Tamatave has fully trebled, while at Antananarivo the civilian use must have doubled, at least. I think it may be safely stated that the gross consumption of flour in Madagascar (including the interior towns of Fianarantoa and Antananarivo) can be estimated at about 900 bags of 100 kilograms each of French manufacture, valued at 21,600 francs ($4,168.80); 1,000 bags of 90 kilograms each of Australian manufacture, valued at 15,000 francs ($2,895); 2,600 bags of 90 kilograms each of Bombay manufacture, valued at 36,400 francs ($7,025.20); total, 4,500 bags, valued at 73,000 francs ($14,089).

Manufacturers' prices.—Bombay flour is purchased in Mauritius at from 9 to 10 rupees ($2.73 to $2.98) per bag, and Australian flour at 10 rupees ($2.98), according to exchange. French flour costs in France 24 francs ($4.63).

Retail prices.—Bombay and Australian flours sell at from $5.50 to $7 per bag of 90 kilograms (198.41 pounds), the higher prices being for the Australian. French flour sells at from $8 to $9 per bag of 100 kilograms (220.46 pounds). By the single pound or in broken lots, it retails at from 4 to 6 cents per pound.

Transportation charges.—From Mauritius, from $5 to $6 per ton; from Marseilles, from 50 to 55 francs ($9.65 to $10.62) per ton.

Import rate.—French flours, free; foreign flours, 10 per cent on cost and charges. At Tamatave, in addition, all flour imports pay 1 per cent municipal tax an original cost.

Character of packing.—Usually packed in bags—Australian and Bombay in bags holding 90 kilograms each and French flour in bags holding 100 kilograms. Flour destined for the use of the army comes in 50-kilogram cases (vide "General remarks").

Merchants handling this line of goods, etc.—Bomemaison Frères, Tamatave and Diego Saurez; F. Laroque & Co., Tamatave, Vatomandry, Fianarantsoa, and Antananarivo; Proctor Bros., Tamatave, Fort Dauphin, Mananjary, Vatomandry, Fianarantsoa, and Maroantsetra; Chan Ming & Cie. and N. Gaquel & Co., Tamatave and Antananarivo; P. Visvilingum & Co., Tamatave; Rebut & Sarrante, Tamatave, Diego Saurez, Majonga, and Nossi Be; Porter, Aitken & Co., Tamatave, Vatomandry, and Antananarivo.

Field of distribution.—From Fort Dauphin, immediate vicinity; from Mananjary, immediate vicinity and interior to Fianarantsoa,

whence the entire Betsileo country is supplied; from Vatomandry, coast ports, north and south, and the interior of the island, including places above named; from Diego Saurez, Manahara, Sambava, coast ports, and interior in vicinity; from Nossi Be, the islands of Nossi Be; from Majonga, the entire west coast of Madagascar and a very few interior towns on the Ikopo River.

General remarks.—The natives of Madagascar seldom eat bread, owing to its expense (vide report on pages 491–492, vol. 10, SPECIAL CONSULAR REPORTS). The liberation of the slaves in Madagascar has already produced and will continue to bring about a short rice crop, which may force the natives to consume the dearer farinaceous products. The flour usually imported here is always more or less deteriorated, owing to the style of packing. I would suggest, for these humid and tropical countries, the packing of American flours in 10 and 15 kilogram tins, soldered tight, or with patent opening device. These tins could then be packed in cases of from 90 to 100 kilograms, which would cost little more than the present method of barreling; and the article would always be in good condition and ready for immediate transport.

For fully a year there has been no apparent trade in American flour, no importations having been made since March 1, 1896.

Population and Meteorological Conditions of Norfolk Island.—Consular Agent Robinson sends from Norfolk Island the following report (received by the Department June 9, 1897), giving statistics relative to the island for 1896:

Return of population, December 31, 1896.

Description.	Males.	Females.	Total.
Norfolk community.			
Married couples	100	100	200
Widows and widowers	19	15	34
Unmarried men and women	10	1	11
Above the age of 20 years	47	37	84
Above the age of 14 years	41	58	99
Under 14 years	111	121	232
...	.....	.....	660
Absent from the island	12	2	14
Total	.....	.....	646
Melanesian Mission.			
White staff	11	8	19
Native men and women	157	46	203
Total	168	54	222
Grand total	.....	.....	868

During the year there were 20 births—7 males and 13 females (1 at mission), 12 marriages, 12 deaths—7 adults (2 males and 5 females) and 5 children (2 males and 3 females); also, 3 deaths at mission (native males).

Meteorological record for 1896.

[Observations taken at 9 p. m.; height, 300 feet.]

Months.	Rainfall.		Barometer.		Thermometer.	
	Number of days.	Quantity.	Highest.	Lowest.	Highest.	Lowest.
		Inches.			*Degrees.**	*Degrees.**
January	4	0.47	29.900	29.700	79	72
February	15	8.48	.850	.510	79	72
March	17	4.07	.830	.440	76	69
April	6	1.88	.934	.500	74	67
May	20	5.84	.900	.466	70	62
June	18	7.66	.900	.408	70	60
July	18	4.83	.740	.120	65	57
August	15	7.86	30.024	.382	66	57
September	16	2.95	29.950	.520	69	59
October	13	1.35	30.136	.584	70	58
November	9	2.88	29.920	.550	72	68
December	13	1.1	.880	.700	76	72
Total	164	49.37	.....	.....	.....	.....

* Fahrenheit.

Collection of Products of the Straits Settlements.—A communication from Consul-General Pratt, dated Singapore, March 18, 1897, says that he has interested himself, with the cooperation of the colonial secretary, in making a collection of the raw products of the Straits Settlements for the benefit of the Philadelphia Commercial Museum, Philadelphia, Pa. The Philadelphia Museum has been notified and expresses its gratification.

The Fruit Season in Jamaica.—Commercial Agent Walton wrote from Port Antonio, April 1, 1897:

Since my last report there has been but little change in the agricultural and industrial condition of the island. Recent rains have cheered the agriculturists, and the prospect for a large yield of bananas and oranges is good. Early last winter a company was organized to carry bananas and oranges from this island direct to England in vessels provided with cold-storage compartments, and several shiploads were sent; but as yet the venture has not proven successful financially. The fruit landed in good condition brought remunerative prices, but in hardly a cargo was 50 per cent of the fruit good.

The fruit season opened with greater activity than usual, and the exports from the island to the United States promise to be greater this season than ever. The price of bananas, which was only 1s. (24 cents) per full bunch during the months of November, December, January, and February, has now gone to double that amount, with the prospect of still higher prices. The prices of cocoanuts range from $12.50 for large to $7.50 for small.

The royal commission appointed by the British Government to inquire into the sugar industry and the industrial condition of the British West India islands, after visiting the other British West Indies, has about completed its inquiries in Jamaica. The report of this commission, when published, will no doubt be valuable reading to all interested in the commercial prosperity of the island.

Sugar Industry in Jamaica.—Under date of April 14, 1897, Consul Eckford sends from Kingston a copy of the schedule of information collected for the commission appointed to inquire into the sugar industry. There is an elaborate series of questions and answers, covering not only the cultivation of sugar, but the general agricultural condition of Jamaica. The following is a summary of the information collected:

The total area of the colony is 2,692,480 acres, approximately, of which 2.97 per cent consists of swamps and useless lands. Of the cultivable land, 2,340,412 acres are in private hands and 272,068 acres belong to the Crown. About half of this cultivable land is at an elevation of 1,000 feet or over. The climate in these regions is cool and salubrious. In the higher altitudes, it is suited to the labor of white men. There is no malaria resulting from damp, undrained land. There are large areas of uncultivated land, belonging both to the Crown and to private owners, that are highly suitable to the cultivation of oranges, coffee, kola, rubber, cacao, nutmeg, etc. An effort has been made to induce persons to take up the Crown lands in freeholds of from 5 to 50 acres, paying one-fifth of the purchase money at once and the rest in ten yearly payments without interest. A refund of one-fifth of the purchase money is given any settler who, within ten years, establishes one-fifth of his acreage in a permanent crop-producing plant. The cost of making these lands accessible depends upon the kind of road provided. Bridle roads can be made for £250 ($1,216) per mile and cart roads for £600 ($2,919).

The principal agricultural industries, in the order of their importance as determined by exports of 1895–96, are sugar, bananas, coffee, oranges, pimento, ginger, and cacao. Pimento is cultivated more

widely than any other plant. Out of the total population of 639,491, 6.1 per cent is employed in the sugar industry. The majority of the sugar estates in the colony comprise over 500 acres each, and employ steam. The production of sugar and rum for the last ten years was:

Year.	Sugar.	Rum.
	Tons.	*Gallons.*
1885–86	22,843	1,940,950
1886–87	28,323	2,648,910
1887–88	28,010½	2,694,560
1888–89	21,728	1,622,060
1889–90	28,210	1,992,210
1890–91	23,014	2,273,700
1891–92	21,994	2,272,600
1892–93	20,408	2,116,180
1893–94	26,221½	2,465,870
1894–95	21,378	2,173,050
1895–96	21,930	2,189,110

In the year 1895–96, 322,252 cwts. of sugar and 41,370 gallons of rum were exported to the United States. To the United Kingdom 54,084 cwts. of sugar and 1,569,106 gallons of rum were exported. The sugar sent to the United States represented 82.43 per cent of the total export thereof, and the rum sent to the United Kingdom represented 83.46 per cent of the total quantity of that article exported. The export of sugar, rum, and molasses during the year under consideration represented 19 per cent of the total value of produce exported.

Ice Machines and Refrigerators in Nicaragua.—Consul O'Hara writes from San Juan del Norte, under date of May 27, 1897, in answer to an inquiry from Mr. W. P. Wilson, director of the Philadelphia Museums, Philadelphia, Pa. (the letter was forwarded to Mr. Wilson June 16), as follows:

I am in receipt of your letter of the 7th instant, inquiring as to ice machines and refrigerating machinery. I had a talk this afternoon with Mr. Edward Kattengell, of Managua. Mr. Kattengell says:

The only ice machine in western Nicaragua for several years was set up by Mr. Theodore Tefel and myself. The machine was purchased in Chicago, the company furnishing it being known, I believe, as the Consolidated Ice Machine Company. The capacity of the machine is 3 tons per day of twenty-four hours. The ordinary output per day is 2 tons. For a long time, we used Lake Managua water, but well water is now used. The well is 40 feet deep and has a flow of 1,000 gallons an hour.

The cost of operating the plant is: One engineer, $200 in Nicaraguan currency ($93.60 in United States currency) per month, with no allowance for extra time; one oiler, $60 ($28.08 in United States currency) per month, with no allowance for extra time; one fireman, $1.60 (74.88 cents in United States currency) per day of

twelve hours and 26 centavos (12.168 cents in United States currency) per hour for extra time; two laborers, $1.20 (56.16 cents in United States currency) each per day of twelve hours and 20 centavos (9.36 cents in United States currency) per hour for extra time; one cartman, same wages as laborers.

Wood costs $3 to $3.25 ($1.40 to $1.52 in United States currency) per cord 3½ varas long, 1 vara high, and 1 vara wide, the vara being equivalent to 38.874 inches. The wood is of various varieties and is of medium hardness. Four cords are used per day of twelve hours. But two horses are employed. The estimated cost of horse feed is 50 centavos (23.4 cents in United States currency) per day for each horse.

The ice is manufactured in blocks of 108 to 110 pounds each, which are sold at 100 pounds. The wholesale price is 3 centavos (1.40 cents in United States currency) and the retail price is 5 centavos (2.34 cents in United States currency) per pound. Ice is delivered in a single horse cart to persons buying in wholesale quantities, but is not delivered to families.

Eighteen to 20 head of cattle are killed per day in Managua and about 12 head in Granada. The average daily consumption of ice in Managua is twelve blocks, or about 1,200 pounds; six to eight blocks have been shipped daily to Granada, and the balance of the output to León, Corinto, and one or two other points on the railway. A 3-ton machine has recently been ordered for Granada, which, if successfully operated, will probably destroy Managua's ice trade in Granada. Ice has retailed in Granada at the same rate as in Managua, but is retailed in León and Corinto at 10 centavos (4.68 cents in United States currency) per pound. The ice is shipped in sacks partly filled with sawdust. The sawdust comes from mills in Managua, and costs nothing. There is a storehouse in connection with the factory, but no refrigerating is done.

At present, the two factories at Managua and Granada can supply the demand in western Nicaragua, as most of the consumers have no ice boxes or refrigerators. They buy a pound or two of ice and put cracked pieces in water, beer, etc., and occasionally in butter dishes. Even at San Antonio, where the sugar refinery employees order a sack or two of ice three times a week, there is no refrigerator. Meats in all the towns must be sold on the day of killing, as but little ice is used in meat stalls and markets. There is nothing in Nicaragua like the American meat market or butcher shop. Meats and vegetables are all sold at the regular market place. In the market building at Granada, there are twenty-seven stalls in which meats are sold.

It might take two or three years to dispose of them, but I believe that from fifteen hundred to two thousand refrigerators, large and small, might be sold in western Nicaragua. They should be sold by the ice company at actual cost. A company doing this could eventually dispose of 25 tons of ice a day. The ice plant at Managua is now owned by a stock company with one hundred and twenty-eight shares of $500 ($234 in United States currency) each. The business is not properly managed, but it pays about 1 per cent a month on the capital stock, a profit of $600 ($280.80 in United States currency) per month. The stock could probably be bought for considerably less than half its face value.

A year ago, Mr. A. P. Criswell, representing the Fred. W. Wolf Company, of Chicago, visited San Juan del Norte. He had had some correspondence with Mr. B. W. Pyle, of San Juan del Norte, who contemplates the manufacture of ice at that place in case of the commencement of work on the Nicaraguan Canal. Messrs. Criswell and Pyle went to Granada and Managua, and from there to San

Salvador, but concluded not to engage in the ice business at either place. Mr. Pyle says:

There is a 5-ton ice machine in San Salvador. Eighty-five head of cattle are killed daily. Wood costs $14 ($6.55 in United States currency) per cord. Ice retails for 5 centavos (2.34 cents in United States currency) per pound. Coffee and rice cleaning machines are run in connection with the ice plant at Salvador.

The ice plant at Managua is in fairly good condition, and requires but little repair. About 2 tons are manufactured daily. The business is improperly managed, and the plant could be bought for very little money.

Five tons of ice per day are all that can be sold in western Nicaragua. I believe more cattle are killed in Granada than Managua. The population of Granada is said to be 20,000, but 12,000 would seem to be nearer the mark. They claim to have 15,000 population in Managua, but the place does not appear to have anything like that number of inhabitants. I may, however, be mistaken as to the population of both places.

Mr. Kattengell informs me that there is a small ice plant in San José, Costa Rica, and another at Port Limon, Costa Rica. The only ice machine in eastern Nicaragua is at Bluefields. The plant was originally set up at Rama, on the Bluefields River. The population of Bluefields is now estimated by the municipal authorities to be 5,000, but others claim that it is nearer 3,000 or 3,500. Our consular agent at Bluefields has been instructed to reply to your letter.

My opinion is that a few small and cheap ice machines might be sold in Nicaragua, but that the outlook for the sale of ice machines and refrigerators is not, upon the whole, very encouraging. Wages in the country are low, and most of the people are too poor to buy ice. No ice is used in San Juan del Norte. Everybody drinks rain water. I have been here over two years; I missed ice for a month or two, but for two years I have had no desire for it.

Paint Trade in San Juan del Norte.—In answer to a request from Mr. Theodore C. Search, president of the National Association of Manufacturers, Philadelphia, Pa., Consul O'Hara sent from San Juan del Norte the following report, dated May 1, 1897 (a copy of which was sent Mr. Search):

The names of the principal merchants in San Juan del Norte, Nicaragua, are C. F. Bergmann, H. F. Bingham, and E. L. D'Souza & Bro.

Mr. Bergmann buys most of his United States goods through the New York commission house of A. P. Stewart and Messrs. Bingham and D'Souza Bros. through the New York commission house of Andreas & Co.

The population of San Juan del Norte, according to the census of March, 1897, is 1,434. The surrounding country is unsettled. There are neither railways nor wagon roads.

The trade in paints, etc., is small. In 1895, the imports were as follows: Thirteen barrels, 2 casks, and 1 drum of linseed oil; 66 boxes, 4 barrels, and 1 drum of turpentine; 20 boxes and 1 keg of varnish; 106 boxes, 2 casks, 28 kegs, and 3 barrels of mixed paints and colors; 42 kegs of dry paints; 26 kegs of red lead; and 1 box and 26 kegs of white lead. It is estimated that four-fifths of the paints imported are from England.

Most of the paints and oils used in the town are imported by F. A. Pellas, the sole owner of the only steamboats on the San Juan River and Lake Nicaragua. Mr. Pellas does business under the name of the Nicaragua Mail Steam Navigation and Trading Company. His New York commission house is that of Muñoz & Espriella.

Mr. Bergmann imports all his paints, colors, and white lead from the United States, handling the manufactures of Longman & Martinez, of New York, exclusively. The colors are put up in 1-pound and 1-gallon tins, respectively, and the white lead in tins of from 1 to 25 pounds each. E. L. D'Souza & Bro. handle John's asbestos paints, put up in barrels. The only colors they carry are put up in 1-pound tins marked "Clinton Paint Works, New York." This white lead comes from England, and is put up in unlabeled 1-pound tins.

Mr. Bingham carries nothing but 1-pound tins of blue, red, imperial green, raw and burnt umber, all put up by the Riverside Color Works, of New York, and 1-pound tins of white lead marked "Newtown Paint Works, New York."

Mr. Pellas has on hand 25-pound tins of red paint and 25-pound tins of burnt umber, put up by the Riverside Color Works, of New York. The major part of his stock, however, consists of 14-pound tins of british green, brilliant green, lead color, black paint, "best white lead," and patent white zinc, all manufactured by Hubbuck & Son, London, England. He also carries a considerable quantity of 6-gallon drums of metallic lead marked "Burrell's Mixed Paints, London." A short time ago he received 20 kegs of white lead in oil from New York, 50 pounds to the keg. The price was 6½ cents per pound, with a discount of 35 per cent.

The following is an abstract of a recent invoice of Hubbuck's paints, etc., shipped to Mr. Pellas: One hundred pounds light stone anticorrosive paint, 24s. ($5.84); 36 tins (4 pounds each) patent drier, 9s. 6d. per dozen, 28s. 6d. ($6.93); 48 tins (14 pounds each) white lead (oil ground), 32s. per dozen, 128s. ($31.14); 48 tins (14 pounds each) black paint (oil ground), 26s. 3d. per dozen, 105s. ($25.55); 48 tins (14 pounds each) black paint (prepared liquid), 42s. 6d. per dozen, 170s. ($41.37); 48 tins (14 pounds each) british green (prepared liquid), 46s. per dozen, 184s. ($44.77); 96 tins (14 pounds each) lead color (prepared liquid), 46s. per dozen, 368s. ($89.54); 36 tins (14

pounds each) light blue (prepared liquid), 49s. 6d. per dozen, 148s. 6d. ($36.13); 24 tins (14 pounds each) red oxide (prepared liquid), 46s. per dozen, 92s. ($22.39); 12 tins (14 pounds each) brilliant green (prepared liquid), $32.48.

At the same time he ordered 48 drums (5 gallons each) dark lead color for canvas decks at 24s. ($5.84) per drum and 40 drums (6 gallons each) metallic lead at 21s. ($5.11) per drum. The discounts allowed were 5 per cent and 2½ per cent. The freight from London to San Juan del Norte cost him 40s. ($9.73) per ton. Freight rates from New York to San Juan del Norte (Atlas Line) are $7 per ton and 15 cents per cubic foot.

Protection of Pearl-Oyster Beds in Venezuela.—The Department has received from Consul Plumacher, of Maracaibo, under date of May 22, 1897, a translation of a new law in regard to the protection of the pearl-oyster beds along the coast of Venezuela. The consul adds that the law, if enforced, will be of great service in preserving this source of wealth. The substance of the regulations is as follows:

Collectors of customs at ports where oyster beds are found shall collect information with a view to preparing statistics as to the number of beds, their situation, extent, the quantity and quality of product, the depth from the surface, the ways employed in gathering the pearls, the abuses committed, and other circumstances relating to the subject. Monthly reports shall be made to the Department of Finance. The fishing of pearls in a way that will tend to the extinction of the beds is absolutely prohibited. Each vessel engaged in the trade shall be provided with a license, issued gratis by the collector of customs, but written on paper on which stamps to the value of 20 bolivars ($3.86) shall be used. This license must be renewed annually, and the name and dimensions of the vessel, the number of the crew, name of the owner, etc., must be stated therein. An inspector will be appointed to see that the provisions of the law are complied with. The Department of Finance, in view of the reports from the collectors of customs and the general inspector, will annually designate the number of oyster beds that can be worked. Licenses will be good only for the places specified, and all other beds shall be reserved for six years, in order to permit the maturing of the pearls. The owners and crew of vessels engaged in the work are held responsible for infringements of the law. The new smooth shell, known under the name of "flor," shall be returned immediately to the water, as it contains no pearls.

Soundings of the Harbors of La Guayra and Puerto Cabello.—Consul Plumacher sends from Maracaibo, in a communication dated June 8, 1897, copies of reports of official soundings in the harbors of La Guayra and Puerto Cabello. The consul says that the reports are published by the War and Navy Department of Venezuela, and he thinks they will be of interest to shipmasters. The

reports, copies of which have been sent to the Bureau of Navigation, are as follows:

La Guayra.—Soundings made on the last of April, the level being taken at medium tide, measured in English feet from southeast to northwest.

Quays.	Soundings.		
	Feet.	*Feet.*	*Feet.*
No. 1	18	19	19
No. 2	24	25	21
No. 3	27	30	34

The quays of Bajo Seco and Cabotaje have the same water, 13 to 18 feet; Dársena has the same water, 13½ feet. The buoys show 21, 23, 26, 30, and 35 feet. Quay No. 1 has lost 3 and 2 feet on its southeast end and its center, respectively. Quay No. 3 has gained 6 feet on its southeast end, due to the accumulation of mud.

Puerto Cabello.—Soundings taken May 5, from east of Castello Libertador to the south of the bay: Entrance to harbor, 54 feet; center of the canal, 42 feet. Landings at the quay: First, 24 feet; second, 24 feet; third, 24 feet; fourth, 24 feet; fifth, 21½ feet. There is a difference of some 13½ feet at high tide.

German Methods of Seeking Foreign Trade.—Consul Monaghan writes from Chemnitz, April 26, 1897:

No land is so small or so far away as to escape the Germans. Their methods in Palestine, reported recently by a British consul, show how success is won. In 1894, England supplied 15.6 per cent of all Palestine's imports; she had, in 1895, only 10.5 per cent; and in 1896, 10.8 per cent. French imports into Palestine have decreased. Germany's exports went up from 7.3 per cent in 1894 to 8.5 per cent in 1895, and 8.9 per cent in 1896. The British consul says (I quote freely from the German report):

> This is unquestionably due to the system adopted by German export houses of sending out a large number of traveling salesmen, who place properly prepared and carefully kept samples before the people visited; and who study tastes, peculiarities in packing, putting up, etc., and prices. The number of traveling agents in Palestine in 1895 was twenty-nine Germans, eighteen Austrians, thirteen Frenchmen, four Englishmen, three Swiss, two Italians, and one Belgian. Two of the English agents represented five London firms.

It is, of course, not only possible, but wise to have one agent represent several houses, as long as he carries goods that in no way conflict. For instance, an agent sent by an export union to sell paints, oils, etc., could carry white lead, dry colors, varnish, putty,

aniline colors, water colors, oil colors for art and for houses, kalsomine, etc., and yet have no one article in the line conflict with the other. In this way, merchants seeking trade in new territory might save much that would have to be paid were a man sent out by each manufacturer.

The English consul continues:

It is therefore evident that the system adopted by Germany in sending out these technically trained agents, especially into new territory, is the only effective way to win such success as has marked the footsteps of their travelers in recent years. Only in this way is it possible to get a good knowledge of other nations' needs, markets, etc.

Germany and South America.—Consul Monaghan, of Chemnitz, May 26, 1897, says:

Germany sent to South America via Hamburg, in 1896, manufactured wares worth 102,000,000 marks ($24,316,000). They were sent to the Argentine Republic, Chile, and Uruguay. In 1895, goods worth 81,000,000 marks were sent; in 1894, 60,000,000 marks. Of these, the Argentine Republic took, in 1896, 51,000,000 marks; in 1895, 34,000,000 marks; in 1894, 27,000,000 marks. The total exports to these countries is put down at 200,000,000 marks ($57,600,000). The growing importance of South American markets for German merchants and manufacturers is manifested by this large growth of trade, not marked by decades, but by single years. While it is true that England leads the list in trade with most South American countries, this Empire is following fast and gaining with each year. British consuls can not help calling attention to Germany's success, especially in the Argentine Republic, in iron wires, bar and band iron, hardware, knives, tools, etc. Bar and band iron and iron wires are now bought by that Republic almost exclusively from Germany; its reductions in duties has done, and is doing, a great deal to help Germany's exports thither. This is especially true in the matter of machinery and motors. The raw products of the Argentine Republic have not had the success in Germany which was feared by German farmers. Her wheat exports to this Empire sunk very much in 1895 and 1896, and are now only one-twelfth of the Empire's importations. More important is the falling off in the importation of quebracho wood. The Argentine Republic is using this wood for railroad sleepers, and has talked some of putting an export duty thereon. A leading editorial in the Government official organ of this city is as follows:

When the new pan-American efforts of the United States are being made, it is of the highest importance for Germany to hold fast to the most-favored-nation treaties with the southern and middle American states. The reciprocity clause in the Dingley bill is based upon a desire to bring about the closest possible com-

mercial relations between the United States and South America, with a view to granting and getting certain tariff reductions, under which the United States will be able to build up a big trade with all the southern and middle American states. That such a clause, if it ever becomes law and effects the desired result, will wound this Empire and others very materially, is manifest the moment one turns to the record of our losses and the United States' gains under the reciprocity provision of the McKinley bill. Many of the middle and southern American states and islands, viz, Puerto Rico, Brazil, Colombia, British West Indies, Cuba, etc., deemed it their duty, if not a commercial and financial necessity, to grant specially reduced rates to the United States, in order to get them to let their products—sugar, coffee, and hides—in free. At that time Germany, because of the most-favored-nation clauses in her treaties with most of these countries, enjoyed every benefit bestowed upon the United States. During those years, there was no commercial treaty with Brazil. The result was that machines, tools, instruments of all kinds, iron and rubber, cotton, and leather and leather goods from Germany had to pay a much higher rate of duty going into Brazil than did the same class of goods from the United States. Thus the most-favored-nation clauses in our commercial treaties act as a protecting wall against all the United States' pan-American projects. Nothing more nonsensical could be thought of than to put these treaties in question without good reasons. It is true that a motion was made last year in the Argentine Senate to give notice to such nations as had treaties containing the most-favored-nation clauses that the same, upon expiration of term, would not be renewed. Up to date nothing has been done to show that the nation is in earnest with this motion. The mover of the motion is on record with the words: "The purpose is to wipe out these treaties in order to make others, giving to nations that take the largest quantities of Argentine articles of export, especially Germany, larger and much more favorable concessions."

How necessary reciprocity is to us, how much the very thought of it disturbs the merchants and manufacturers here, how much it has helped in times past, how much it must help in times to come, if organized and carried out in a just, equitable, and friendly way, is apparent from all one hears, reads, and sees.

The University of Bonn.—Acting Consul Madden sends from Cologne, under date of April 30, 1897, a comprehensive report, covering the work of the university, the faculty, the number of students in different branches, cost of lectures, etc. The report has been referred to the Bureau of Education.

Change in Numbering the Hours in Belgium.—The following has been received from Consul Johnson, dated Antwerp, May 10, 1897:

I send a translation of a recent public notice, coming from the Belgian Minister of State Railways, changing the manner of calling the hours of the day:

Beginning on May 1, 1897, and by virtue of a decision of the Minister of the State Railways, the naming of the hours of the day will be made from 0 to 24 By reason

of the adoption of this new regulation, the indications M (matin—morning) and S (soir—evening) appearing in the official railway guide will be suppressed. The minutes comprised between midnight and 1 o'clock in the morning, such as 12.02, 12.13, and 12.47, will be indicated by a zero followed by a period and by the number of minutes corresponding, viz, 0.2, 0.13, and 0.47. Midday will be always indicated by 12. Midnight will be indicated, according to the circumstances, by 0 or 24. For a train which leaves a station exactly at midnight, it will be written that it leaves at 0 of the day during which the train is in movement. For a train which arrives at a station exactly at midnight, it will be written that it arrives at 24 of the day during which the train has been in movement. The dials of all the station clocks will be completed by the addition of the figures 13, 14, * * * 24, placed, respectively, just beneath the existing figures 1, 2, * * * 12.

This regulation is now used in the official State railway guide, and is posted in all the post-offices of the Kingdom.

Netherlands-Bulgarian Convention.—Minister Quinby writes from The Hague, under date of July 1, 1897, that the Minister of Foreign Affairs makes public announcement that, on the 24th of June, 1897, notes were exchanged by the Netherlands and Bulgarian Governments, in virtue whereof, from that date, all Netherlands and Netherlands colonial products on importation into Bulgaria shall be subject to no higher import duty than that levied on similar products of the most-favored nation.

Bicycles in Russia (Correction).—Consul-General Karel, St. Petersburg, August 2, writes relative to his report on "Bicycles in Russia," printed in CONSULAR REPORTS No. 203 (August, 1897):

To-day, the ADVANCE SHEETS OF CONSULAR REPORTS for August reached me, and in my report on "Bicycles in Russia," I notice a small mistake slipped in.

After my clerk copied the report, reading it over, I discovered that he misspelled the word "too" (also), writing "two," which I corrected; but the error appears in the printed report.

I wished to convey the idea that bicycles now are not only imported from Germany and England, but also from the United States; but the report, as printed, says that only two bicycles came from the United States to Russia.

The manuscript of Consul-General Karel's report, as received at the Department, read as follows:

In Russia are sold bicycles of Russian, American, English, and German make. The principal import is made from Germany; then comes England, and last year two from the United States.

What the consul-general intended to have written was that "bicycles were also imported from the United States" last year; but the editor could only have assumed from the text that "two bicycles were imported from the United States last year."

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
John H. Miller, Port Stanley.	April 16, 1897	Projected naval station in the Falkland Islands.	Navy Department.
E. Whidden, St. Stephen...	July 31, 1897	Crop report.....	Department of Agriculture.
John Karel, St. Petersburg..	July 5, 1897	Map showing condition of grain in European Russia.	Do.
Do	June 5, 1897	Russian grain in Germany..	Do.
Do	June 12, 1897	Export of Russian flour.....	Do.
William Hahn, Stuttgart...	Feb. 13, 1897	Forestry in Würtemberg.....	Do.
A. C. Johnson, Stuttgart...	June 18, 1897	Würtemberg vineyards.....	Do.
E. Schneegans, Saigon.....	June 26, 1897	Rice report.....	Do.
Philip B. Spence, Quebec...	May 25, 1897	Canadian banking system...	Comptroller of the Currency.

FOREIGN REPORTS AND PUBLICATIONS.

Foreign Commerce of China in 1896.—The Revue du Commerce Extérieur, Paris, July 3, 1897, takes the following from the report of the secretary of the imperial customs:

The total foreign commerce of China rose from 315,000,000 haikwan taels ($245,700,000) in 1895 to 333,600,000 taels ($260,208,000) in 1896, of which 202,590,000 taels ($158,301,000) were in imports and 131,081,000 taels ($102,243,180) in exports.

The following table gives the imports and exports according to the principal countries:

Countries.	Imports.		Exports.	
	Taels.		*Taels.*	
Great Britain	44,571,000	$34,770,380	11,282,000	$8,799,960
Hongkong	91,357,000	71,258,460	54,053,000	42,161,340
British India	23,027,000	17,961,060	2,176,000	1,697,280
Singapore and Straits Settlements	3,240,000	2,527,200	1,739,000	1,356,420
Australasia	535,000	417,300	688,000	536,640
United States	11,930,000	9,305,400	11,124,000	8,676,720
Europe (except Russia)	9,432,000	7,356,960	18,078,000	14,300,840
Russia	2,035,000	1,587,300	12,582,000	9,813,960
Japan	17,390,000	13,564,200	11,379,000	8,875,620
Macao	3,984,000	3,107,520	2,223,000	1,733,940
Canada	2,148,000	1,675,440	427,000	333,060

Taken as a whole, the figures for 1896 show decided progress over those of 1895, for, although the exports were somewhat less, the imports increased in a marked manner, especially in cotton tissues and thread. Woolens, metals, and petroleum should be mentioned among the increased imports. A large quantity of cotton goods came from the United States. Cotton thread came chiefly from India and Japan. India sent during 1896, 195,043,000 pounds (53,400,000 pounds more than in 1895); Japan exported to China 13,500,000 pounds (2,500,000 pounds more than during the preceding year). The imports of Italian cloths increased from 63,000 pieces in 1895 to 161,000 pieces in 1896. There is a growing demand for most metals, especially for iron nails, steel, and old iron, the importation of which has doubled during the year. Other articles which sell readily are candles, cigars and cigarettes, clocks, dyestuffs, flour, glass, needles, petroleum, and soap.

The decrease in the exports of silk and tea (the two chief articles of export of China) is due to various causes. The poor harvest, the lack of demand in the United States, and the high prices caused by the speculation of certain Chinese merchants are responsible for the smaller export of silk. The teas of India and Ceylon are injuring the sale of the Chinese product; but now that the factories are adopting the methods of preparation employed in India and Ceylon, it is thought that within a few years the Chinese tea will regain much of the lost ground.

Japanese Cheap Labor.—The London and China Telegraph, London, June 21, 1897, says:

It is interesting to note that Japan is importing cheap laborers from Korea to work in her coal mines. Five years ago, the wages of carpenters were 33 cents a day. Now they advertise that their wages have risen to 80 cents a day—say 1s. 8d. (40 cents in United States currency). The cost of living has nearly doubled in five years and the cost of labor has risen in proportion. Rice, in 1890, was $4.90 a koku; to-day, it is $8.90 to $9.10 (about $4.50). The bogey of Japanese cheap labor, which many English writers are so fond of calling up from the (to them) vasty deeps of the unknown East, is as illusory as any other phantom.

Gold in Russia.—From the London and China Telegraph, London, June 21, 1897, the following is taken:

A writer in a Parisian journal points out that Russia occupies a singularly interesting position to-day as a gold producer. She is gradually feeling her way from a silver standard to a gold, and she is herself the fourth largest producer of the more precious metal. It is estimated that eastern Siberia, including the region of the Yenissei, will alone give an annual production of gold of the value of £3,000,000 ($14,599,500). With the completion of the Transsiberian line, there will be four great and steady producers of gold—the United States, South Africa, Australia, and Siberia, with her neighboring Chinese territories. Besides these, there must continue to exist a number of other producers, like India, Brazil, the Guianas, British Columbia, Mexico, Germany, Austria-Hungary, and Bolivia. But these, it believes, can never seriously compete with the four producers just named.

Siberian Gold Mines.—A paragraph in the London and China Telegraph, London, June 21, 1897, reads:

Some details furnished to the Geographical Society of Paris confirm the statements made from time to time as to the value of the gold deposits in Siberia. The particulars were given by M. E. D. Levat, C. E., who went over the ground in the company of a Russian engineer, M. Th. Sabachnikoff. They state that an immense development of the gold placers has been carried on between the Ural and Vladivostock. Nowhere in the world, states M. Levat, are there such vast stores of gold and spread over so large a surface. Eastern Siberia at present produces between 135,000,000 and 150,000,000 francs of gold, without taking into account what is clandestinely exported. In the Amoor province, at least a quarter of the production is so dealt with. The majority of the mines are situated far from the Amoor, from whence stores and provisions have to be drawn and considerable transport difficulties are experienced. Work can only be carried on for about one hundred to one hundred and twenty days in the year—say from May to September—for the indispensable water is frozen hard for the rest of the time. During the cold season, however, prospecting is carried on. No medal is without its reverse. The smuggling of gold is reduced to a fine art. Entire villages exist of gold stealers, who are practically free, as the result of the immense distances open to their enterprise. If caught, they affirm the gold comes from China. Even on the Russian gold fields, theft by the workmen can not be prevented, and their methods of disposing of it are more

numerous than would be imagined. The want of greater development must be put down to the difficulties of transport and the want of further technical advice. The Siberian Railway will be the means of remedying the two defects.

Details of Roumanian Commerce in 1895.—The Annales du Commerce Extérieur, Paris, 1897, No. 5, has these figures:

The total importations into Roumania amounted to 304,574,517 francs ($58,782,-881. The principal articles were:

Articles.	Value.	
	Francs.	
Alimentary products	40,549,000	$7,825,957
Medical and chemical products	26,536,000	5,121,448
Animals (including horses)	1,831,000	353,383
Oils and fats	6,075,000	1,162,475
Skins and leather	11,100,000	2,142,300
Textiles and manufactures of	111,914,000	21,599,402
Paper and articles of	11,465,000	2,212,745
Wood and articles of	5,210,000	1,005,530
Combustibles, mineral and bituminous	9,421,000	1,818,253
Earthenware and glassware	10,870,000	2,097,910
Metals, crude and worked	58,882,000	11,364,226

The exports, the total value of which was 265,048,411 francs ($49,417,343), were divided, according to principal articles, as follows:

Articles.	Value.	
	Francs.	
Alimentary products	234,584,000	$45,274,712
Living animals (including horses)	8,487,000	1,637,991
Skins and leather	3,598,000	694,414
Textiles and manufactures of	5,380,000	1,038,340
Wood and articles of	4,848,000	935,664
Metals, crude and worked	2,972,000	573,596

The export of grain and flour, which was included under the heading "alimentary products," amounted to 194,857,000 francs ($37,-607,401) and was the largest single article exported. The import amounted to something over 5,000,000 francs ($965,000).

Use of X Rays in Custom-Houses.—In the Revue du Commerce Extérieur, Paris, July 3, 1897, the following paragraph appears:

Some interesting experiments took place in the office of the general director of the customs on the 23d of last June, in the presence of the council of administration and of the chiefs of the service. It was the object to see if the X rays could be put to practicable use in the examination of imported articles, and the experi-

ments were so successful that the customs bureau can at once proceed to employ this method. The inspector can decide the contents of a package at a glance. This application of a scientific process will greatly facilitate the discovery of fraud. It will be of benefit to travelers, since, in the majority of cases, the opening of baggage will not be necessary.

Commercial Movement of Guatemala in 1895.—From the Moniteur Officiel du Commerce, Paris, May 6, 1897, the following is taken:

The total commerce of Guatemala in 1895 amounted to the value of 34,697,206 pesos ($17,036,328*). Of this amount, 8,911,630 pesos ($4,375,612) were imports. The exports consisted chiefly of coffee, bananas, skins, and rubber. Shoes are also an article of export. Germany imports from Guatemala more largely than does any other country; the United States, England, and France follow in the order of their importance. Of the imports into Guatemala, the United States has about 37 per cent, Germany 21 per cent, England 20.5 per cent, and France 12 per cent. Although the United States has the largest part of the import trade, Germany would equal her if certain alimentary products which must necessarily remain the monopoly of the United States were eliminated from the total. Another advantage which the United States has is her proximity, which lessens the cost of transport and so shortens the voyage that orders can be executed in a month, by way of New York or San Francisco, which would need at least three or four months if they were placed in Europe. It is an important question for us to discover why Germany has nearly twice as much commerce with Guatemala as France. In Germany, the merchant marine and the exporters aid and sustain each other. National industries are encouraged by the community. Banks, railroads, and individual enterprises of all sorts are favored by commerce. The intervention of the Government is asked only in case of international legislative difficulties. The Germans study the tastes, habits, and needs of their clients. Alluring credits are offered, payments are made easy, delivery of goods is prompt and exact, and exchanges are accepted that are refused in France. Why should not Havre imitate Hamburg in buying coffee from Guatemala? There is the same opening for French trade as for German, and petty jealousies and rivalries should not be allowed to interfere. United and vigorous effort will result in success, as Germany has shown us.

Commerce of Puerto Rico in 1894.—The Estadística General del Commercio Exterior, Puerto Rico, 1897, gives the following statistics:

The importations during the year 1894 amounted to 19,778,587 pesos ($18,316,971), an increase of nearly 2,500,000 pesos over the previous year. The exports were to the value of 17,295,535 pesos ($16,015,665), an increase of some 500,000 pesos over 1893. The articles of import in which the increase was most marked were rice, flour, and fish. There was a decrease in the import of wrought iron. In the commerce with the United States, the imports amounted to 4,852,565 pesos ($4,593,481) and the exports to 2,433,024 pesos ($2,251,970). The chief articles imported were coal, woods, flour, fish, and petroleum. Sugar was the principal article exported. The largest amount of trade was transacted with Spain, the United States, England, and Germany following in order.

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*Taking the value of the peso on January 1, 1896, as 49.1 cents.

Industrial Condition of Paraguay.—The Bollettino del Ministro degli Affari Esteri, Rome, October, 1896, says:

It has been estimated that there are about 17,000 foreigners resident in Paraguay. The laws are very liberal in regard to strangers. They are not obliged to become citizens, although citizenship is easily acquired. They are allowed all the privileges and civil rights that are granted to natives. There are 1,305 commercial houses in Paraguay, of which 117 are under the management of Italians, with an actual capital, it is calculated, of some 8,000,000 francs ($1,544,000). In this list may be counted manufacturers of furniture, clothing, foot wear, hats, matches, alimentary products, ice, etc. Clothing and shoes are expensive. Labor is paid at the following rates: Masons, from 3 to 4 pesos per day (49 to 65 cents*); carpenters, from 2 to 2.50 pesos (32 to 40 cents); smiths, 2.50 to 3 pesos (40 to 49 cents); day laborers, 1.50 pesos (24 cents); machinists, 70 to 100 pesos per month ($11.48 to $16.40); firemen, 30 to 50 pesos ($4.90 to $8.20); tinkers, 2.50 to 3 pesos (40 to 49 cents) per day; bakers, 1.50 to 2 pesos (24 to 32 cents); shoemakers, 2 to 3 pesos (32 to 49 cents); diggers, 2 to 3 pesos (32 to 49 cents); cooks, 20 to 40 pesos ($3.20 to $6.40) per month; gardeners, 40 pesos ($6.40) per month; domestic servants, 10 to 15 pesos ($1.64 to $2.45) per month.

There is a railway which connects the capital (Asuncion) with Pirapò, a river port where a great quantity of wood is shipped. It is intended to complete the road to Encarnacion, on the Parana River, and thus connect with the Argentine Republic. The railway touches Luque, Areguá, Paraguarí, and Villa Rica, which are among the most important commercial centers of the country. But the rivers are the usual means of communication. The Paraguay is navigable throughout the country, and the Parana for a long distance. By the first, the Brazilian State of Matto Grosso and Chaco Argentino can be reached; the second places Paraguay in connection with the Argentine province of Corrientes, and thus with Plata and the Atlantic. There are a number of navigation companies. There is a weekly service of good boats from Montevideo to Asuncion, touching at Humaità, Pilar, Villa Franca, Oliva, and other points. It takes eight days to ascend the rivers, including a day and a half stop at Buenos Ayres. On the return trip, four days are spent between Asuncion and Buenos Ayres, where a stop is made long enough to discharge cargo before proceeding to the capital of Uruguay. Freight boats make frequent trips up and down the rivers; some go as far as Villa Concezione. There is a regular service between the capital and Villa Hayes, between Corrientes, Posadas, and Villa Encarnacion, and between Posadas and Tacurù Pucù, on the Parana.

There are three telegraph lines—from Asuncion to Pirapò, from the capital to Paso de la Patria, in the Argentine province of Corrientes (which connects with La Plata, and thus with Europe and America), and from the capital to Villa Hayes. It is expected that by the end of the year another will be in operation between Asuncion and Villa Concezione.

Over 5,000,000 lire ($1,000,000) worth of yerba mate was exported in 1894. The export of skins, animal fats, etc., amounted in the same year to 1,446,614 pesos ($237,244). Plumes of birds (which abound in number and variety) are also exported. Tobacco was exported in 1894 to the value of 1,294,860 pesos ($202,357). This amount would have been much increased if the industrial appliances were less primitive. The tobacco is of excellent quality, and received the gold medal at the Paris Exposition of 1889. There are inexhaustible treasures of wood in Paraguay; 970,000 pesos ($162,080) worth were exported in 1894; also 45,616 pesos ($7,481) of ornamental plants, for which there is a growing demand.

* The Italian consul says that the peso, at the time the report was made, was valued at about 85 centimes of the lira, which would equal 16.4 cents in United States currency.

The articles imported during the second trimester of the year under consideration were:

Articles.	Number.	Articles.	Number.
Alcohol.....barrels...	263	Iron wire.....rolls...	3,055
Do.....bottles of 4 gallons...	170	Cheese.....casks...	203
Anise.....do.....	266	Animal fats.....barrels...	201
Absinthe.....cases of 12 bottles...	449	Oil.....tin cans...	276
Cognac.....do.....	323	Beans and dried vegetables, sacks of 100 kilograms (220.46 pounds).....	198
Beer.....cases of 48 bottles...	620	Indian corn, sacks of 100 kilograms (220.46 pounds).....	4,291
Gin.....cases of 12 bottles...	118	Various machines, parts of.....boxes...	154
Do.....bottles of 4 gallons...	280	Soap.....do.....	147
Champagne.....cases of 12 bottles...	40	Zinc.....sheets...	150
Bordeaux.....do.....	970	Olives, barrels of 7 kilograms (15.43 pounds.....	244
Italian wine.....barrels...	429	Petroleum.....cases...	1,150
Spanish wine.....do.....	540	Rice, sacks of 100 kilograms (220.46 pounds).....	997
Vermouth.....cases of 12 bottles...	448	Sugar, sacks of 115 kilograms (253.52 pounds).....	1,018
Bitters.....do.....	881	Grain, unground.....sacks...	3,040
Vinegar.....bottles of 4 gallons...	227	Bluing, cases of 11 kilograms (24.25 pounds).....	1,524
Various liquors.....cases of 12 bottles...	37	Dried herbs, bales of 50 kilograms (110.23 pounds).....	1,893
Candles, cases of 7 kilograms (15.43 pounds).....	1,275		
Paper.....bales...	711		
Tissues.....do.....	747		
Coffee, sacks of 100 kilograms (220.46 pounds).....	397		
Flour, sacks of 90 kilograms (198.41 pounds).....	12,515		

German Commerce in the Transvaal.—An article published in a German paper and translated in the Revue du Commerce Extérieur, Paris, June 5, 1897, says:

Since the foundation of the Boer Republic, the Germans have had successful commercial relations with the country; but this prosperity is capable of much greater development. Efforts will be well repaid, for the Transvaal has no large industries and is consequently dependent upon importation to satisfy the needs of a population which, on account of the immigration toward the gold mines, is constantly increasing. Until recently, the Republic imported only through the ports of Cape Colony and the commerce was in the hands of English firms. These traditions have been broken, and a number of colonists from both Germany and Holland have emigrated to the country. The adoption by England of a tariff on German merchandise in the ports of Natal and Cape Colony and the construction of the railway in the Transvaal attracted German imports to Pretoria and Johannesburg. Perseverance and a knowledge of the conditions of the market are necessary. It is a mistake to think that the Boers have any special friendship for the Germans on account of the similarity of race. This may be true in isolated cases, but as a general rule the Boer treats every one who is not a Boer or an African as an "uitlander," or stranger. If German exporters become acquainted with the needs of the country, they have a fair chance to share the commerce with England and America.

The principal articles which are of daily use in the Transvaal, are: Calico tissues (white and colored), ticking, flannels, cotton and woolen covers, cotton comforts, house linen, canvas for sails, etc.; large and small iron wire, metal trellis, ropes, and brushes; all sorts of preserved fruits, comestibles of milk, etc. (nine-tenths of these must be imported); chocolate, cacao, bonbons, sweetmeats, and confectionery

of all sorts; butter, margarin, cheese, liqueurs, beer, and cigars; perfumery and soaps, Swedish matches, candles of stearin, chemical products, medicines, alcohol, furniture, instruments of iron, zinc, and tin, and works in stucco; machines of all sorts, bicycles, construction materials, etc.; papers of all sorts, books, ledgers, inks, pencils, etc.; carriages, from the heavy Boer cart to the most elegant conveyance.

The Government of Germany should not delay in lending assistance to trade with the Transvaal. It is well known that the agent sent by Germany to the Chicago Exposition succeeded in forming business relations between some eight hundred German and American houses. The same method should be adopted in the Transvaal. Norway and Sweden have already made this experiment with success. The agent should have a good technical education and understand various branches of trade. He should be assisted by a chamber of commerce which would furnish information in regard to weights and measures, methods of packing, color of merchandise, reliability of firms, and the needs of the trade.

Commerce of the Transvaal in 1896.—The Revue du Commerce Extérieur, Paris, in its editions of June 19 and July 3, has an article from the French consul at Pretoria on the commercial condition of the South African Republic. The article says, in part:

In spite of all the difficulties and disasters of 1896, the Republic continues to enjoy the era of prosperity which the discovery of the gold mines inaugurated. Neither the Johannesburg troubles, nor the bovine plague (which is still destroying the cattle), nor the poor harvests have seriously injured commerce or interrupted industry in 1896. The value of the imports during this year was 352,000,000 francs ($67,936,000), or 107,000,000 francs more than during the preceding year, which, in turn, was more than 84,000,000 francs in excess of that for 1894. Most of the imports (200,000,000 francs) came through Cape Colony, thanks to the regular lines of steamers and the enterprising spirit of the commercial houses of Port Elizabeth and East London. Nearly 50,000,000 francs ($9,650,000) of this amount was for products of Cape Colony. About 75,000,000 francs ($14,475,000) came through Natal, one-half of this representing the special commerce. The chief articles of import were (in round numbers):

Articles.	Value.		Articles.	Value.	
	Francs.			*Francs.*	
Steel	2,600,000	$501,800	Chemicals and drugs	6,000,000	$1,158,000
Animals	18,000,000	3,474,000	Tobacco	3,000,000	579,000
Butter	3,000,000	579,000	Clothing	25,000,000	4,825,000
Jewelry and objects of art	11,000,000	2,123,000	Hats	1,500,000	289,500
Wood	15,000,000	2,895,000	Leather and articles of	11,000,000	2,123,000
Coffee	3,000,000	579,000	Groceries	6,500,000	1,254,500
Wagons and carriages	6,000,000	1,158,000	Cotton and linen goods	8,000,000	1,544,000
Bicycles	2,000,000	386,000	Wool goods	5,000,000	965,000
Cereals and flour	27,000,000	5,211,000	Iron and articles of	23,000,000	4,439,000
Oils	2,400,000	463,200	Railway materials	15,800,000	2,779,400
Machinery	55,000,000	10,615,000	Spirits	9,000,000	1,737,000
Furniture	9,000,000	1,737,000	Sugar	4,000,000	772,000
Petroleum	1,000,000	193,000	Wines	4,000,000	772,000

The administration of the customs of the South African Republic does not publish an account of the exports. According to statistics furnished by the railway companies, the principal articles exported were coal, minerals, and skins.

55TH CONGRESS, 1st Session. } HOUSE OF REPRESENTATIVES. { Doc. No. 91, Part 2.

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THE BUREAU OF FOREIGN COMMERCE.

From and after July 1, 1897, the Bureau of Statistics, Department of State, will be known as the Bureau of Foreign Commerce, in accordance with the following order of the Secretary of State:

DEPARTMENT OF STATE,
Washington, July 1, 1897.

Under the authority conferred upon me by chapter 268, United States Statutes at Large, Fifty-fourth Congress, second session, under the heading "Publication of Diplomatic, Consular, and other commercial reports," the name of the Bureau of Statistics of this Department is hereby changed to the Bureau of Foreign Commerce, and the title of the Chief of the Bureau of Statistics shall hereafter be Chief of the Bureau of Foreign Commerce.

JOHN SHERMAN,
Secretary of State.

The reasons for the change are set forth in the following report from the Chief of the Bureau of Statistics to the Secretary of State:

DEPARTMENT OF STATE,
Washington, June 30, 1897.

Honorable JOHN SHERMAN,
Secretary of State.

SIR: I have the honor to call your attention to the clause in the diplomatic and consular appropriation bill for the fiscal year ending June 30, 1898, approved February 20, 1897, which provides for the publication of diplomatic, consular, and other commercial reports. (See page 590, United States Statutes at Large, Fifty-fourth Congress, second session.) The paragraph reads as follows:

Preparation, printing, publication, and distribution, by the Department of State, of the diplomatic, consular, and other commercial reports, twenty-five thousand dollars; and of this sum the Secretary of State is authorized to use not exceeding three thousand one hundred and twenty dollars for services of employees in the Bureau of Statistics, Department of State, in the work of compiling and distributing such reports, and not exceeding two hundred and fifty dollars in the purchase of such books, maps, and periodicals as may be necessary to the editing of diplomatic, consular, and other commercial reports: Provided, That all terms of measure, weight, and money shall be reduced to, and expressed in, terms of the measure, weight, and coin of the United States, as well as in the foreign terms; that each issue of consular reports shall not exceed seven thousand copies: And provided further, That the Secretary of State be, and he is hereby, authorized to change the

name of the Bureau of Statistics to the Bureau of Foreign Commerce, and that the foregoing provision shall apply with the same force and effect to the Bureau of Foreign Commerce as to the Bureau of Statistics.

You will perceive that the Secretary of State is authorized by the foregoing to change the name of the Bureau of Statistics of this Department to the Bureau of Foreign Commerce, and that the provision for the maintenance of the Bureau of Statistics is made to apply with the same force and effect to the Bureau of Foreign Commerce. As the appropriation becomes available on the 1st of July, I respectfully ask authority from you to carry the legislation specified into effect. The reasons for making the change, as stated to Congress and approved by that body, are:

(1) The confusion arising from the fact that there are three bureaus of statistics in the Executive Departments, viz:

Bureau of Statistics, Department of State;

Bureau of Statistics, Treasury Department;

Division of Statistics, Department of Agriculture.

Shortly after taking charge of this Bureau, I became impressed with the fact that the general public was unable to discriminate between the various bureaus of the same name, and that unnecessary labor and delay resulted.

(2) The name Bureau of Statistics does not properly denote the functions of this Bureau, which is exclusively commercial in its character, its work being that of collecting, compiling, and distributing the commercial reports of our diplomatic and consular officers. There is a wide range of statistics with which the Bureau has nothing to do, and its designation as a Bureau of Statistics is, therefore, misleading. The use of the words Bureau of Foreign Commerce, on the other hand, besides correctly indicating the character of the work, is likely, in my judgment, to impress upon the public mind the importance of the commercial functions of this Department.

In view of these considerations, I submit the draft of an order for your signature.

Respectfully yours,

FREDERIC EMORY,
Chief, Bureau of Statistics.

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Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to July 1, 1897, have been prepared to assist in computing the proper values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz, (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*.	Gold and silver..	Peso	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc.....	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil.....	Gold	Milreis.....	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	.....do	Dollar.....	1.00	
Chile.....	.....do	Peso.....	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica.....	.....do	Colon.....	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	.....do	.92,6	Gold—doubloon ($5.01,7); silver—peso.
Denmark	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Egypt.....	.....do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	.....do	Mark.....	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark.....	.23,8	Gold—5, 10, and 20 marks.
Great Britain.....	.....do	Pound sterling...	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver..	Drachma.....	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	.....do	Gourde.....	.96,5	Silver—gourde.
Italy.....	.....do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Japan‡.....	Gold.....	Yen.....	.99,7	Gold—1, 2, 5, 10, and 20 yen.
Liberia	.....do	Dollar.....	1.00	
Netherlands§.....	Gold and silver..	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar.....	1.01,4	Gold—$2 ($2.02,7).
Portugal.....	.....do	Milreis.....	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖.....	.....do	Ruble.....	.77,2	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain.....	Gold and silver..	Peseta.....	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster.....	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela.....	Gold and silver..	Bolivar.....	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875, the gold standard prevailed in the Argentine Republic.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ended July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

‡ For particulars as to the change from silver to the gold standard, see CONSULAR REPORTS No. 201, p. 259.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

‖ Russia: Gold the nominal standard; silver the actual standard.—*Note by the United States Treasury.* See, also, review of Russian industries and commerce by the Russian Minister of Finance in "Review of the world's commerce," Commercial Relations of the United States for 1895-96, p. 230.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver.....	Florin.....	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia.....	.....do.....	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America....	.....do.....	Peso.....	.96,5	.91,8	.91,8	.83,6	.....	.....
China.....	Silver.....	Haikwan tael..	1.61	1.61	.....	.....	.....	.....
Colombia.....	.....do.....	Peso.....	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador.....	.....do.....	.....do.....	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†.....	Gold.....	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India.....	Silver.....	Rupee.....	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan.....	Gold.....	Yen.....	.99,7	.99,7	.99,7	.99,7	.....	.....
	Silver.....		.....	.....	.....	.....	.87,6	.86,9
Mexico.....	.....do.....	Dollar.....	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡.....	Gold and Silver.	Florin.....	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru.....	Silver.....	Sol.....	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia.....	.....do.....	Ruble.....	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli.....	.....do.....	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver.....	Florin.....	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia.....	.....do.....	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America....	.....do.....	Peso.....	.....	.....	.....	.69,9	.68	.85
Colombia.....	.....do.....	.....do.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador.....	.....do.....	.....do.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†.....	Gold.....	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India.....	Silver.....	Rupee.....	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan.....	Gold.....	Yen.....	.....	.....	.99,7	.99,7	.99,7	.99,7
	Silver.....		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico.....	.....do.....	Dollar.....	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru.....	Silver.....	Sol.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia.....	.....do.....	Ruble.....	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli.....	.....do.....	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

* The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

† The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1894.				1895.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.51,6	$0.46,5	$0.45,7	$0.46,4	$0.45,5	$0.44,1	$0.48,6	$0.48,6
Central America.*	Silver peso	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
China†	Shanghai tael	.76,2	.68,6	.67,6	.68,5	.67,3	.65,2	.71,8	.71,8
	Haikwan tael	.84,9	.76,5	.75,3	.76,3	.74,9	.75,6	.80	.80
	Tientsin tael				.72,7	.71,4	.69,2	.76,1	.76,2
	Chefoo tael				.71,7	.70,4	.68,3	.75,1	.75,2
Colombia	Silver peso	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
Ecuador	do	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
India	Silver rupee	.24,5	.22,1	.21,7	.22	.21,6	.21	.23,1	.23,1
Japan‡	Silver yen	.55,6	.50,1	.49,3	.50	.49,1	.47,6	.52,4	.52,4
Mexico	Silver dollar	.56	.50,5	.49,7	.50,4	.49,5	.47,9	.52,8	.52,8
Persia	Silver kran							.08,9	.09
Peru	Silver sol	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
Russia§	Silver ruble	.41,3	.37,2	.36,6	.37,1	.36,4	.35,3	.38,9	.38,9
Tripoli	Silver mahbub	.46,5	.41,9	.41,3	.41,8	.41,1	.39,8	.43,8	.43,8

Countries.	Monetary unit.	1896.				1897.		
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.
Bolivia	Silver boliviano.	$0.49,1	$0.49,3	$0.49,7	$0.49	$0.47,4	$0.46,8	$0.44,3
Central America*	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,5	.44,3
China†	Amoy tael				.79,3	.76,7	.75,7	.71,7
	Canton tael				.79	.76,5	.75,5	.71,5
	Chefoo tael	.75,9	.76,3	.76,9	.75,8	.73,3	.72,4	.68,6
	Chinkiang tael				.77,4	.74,9	.73,9	.70
	Fuchau tael				.73,3	.70,9	.70	.66,3
	Haikwan tael	.80,8	.81,2	.81,9	.80,6	.78	.77	.73,1
	Hankow tael				.74,2	.71,7	.70,8	.67,1
	Ningpo tael				.76,2	.73,7	.72,8	.68,9
	Niuchwang tael				.74,3	.71,9	.71	.67,2
	Shanghai tael	.72,5	.72,9	.73,5	.72,4	.70	.69,1	.65,5
	Swatow tael				.73,2	.70,8	.69,9	.66,2
	Takao tael				.79,8	.77,2	.76,2	.72,2
	Tientsin tael	.76,9	.77,3	.78	.76,8	.74,3	.73,4	.69,5
Colombia	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3
Ecuador	do	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3
India	Silver rupee	.23,3	.23,4	.23,6	.23,3	.22,5	.22,2	.21,1
Japan‡	Silver yen	.52,9	.53,2	.53,2	.52,8	.51,1	.50,5	
Mexico	Silver dollar	.53,3	.53,6	.54	.53,2	.51,5	.50,8	.48,2
Persia	Silver kran	.09	.09,1	.09,2	.09	.08,7	.08,6	.08,2
Peru	Silver sol	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3
Russia§	Silver ruble	.39,3	.39,5	.39,8	.39,2	.37,9	.37,4	
Tripoli	Silver mahbub	.44,3	.44,5	.44,9	.44,2			

*Costa Rica and British Honduras have the gold standard (see table showing countries with fixed currencies).

†China (silver). The haikwan tael is the customs tael. The "British dollar" has the same legal value as the Mexican dollar in Hongkong, the Straits Settlements, and Labuan.

‡Japan has adopted the gold standard (see CONSULAR REPORTS No. 201, p. 259).

§The Treasury Department, in its estimates of foreign values for the quarter ended July 1, 1897, gives Russia the gold standard, and in a footnote says: "Gold is the nominal standard, silver practically the standard." To appreciate the complicated state of Russian currency, see CONSULAR REPORTS No. 188, pp. 34-40, and Special Consular Reports, Money and Prices in Foreign Countries, part 2, pp. 381-400.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Dun	Japan	1 inch.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	4 yards.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Kota	Japan	5.13 bushels.
Korree	Russia	3.5 bushels.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	113⅜ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy)
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅘ acres.
Marc	Bolivia	0.507 pound.
Maund	India	82⅔ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¼ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	3.6 feet.
Seer	India	1 pound 13 ounces.
Shaku	Japan	10 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.
Vara	Argentine Republic	34.1208 inches.
Do	Castile	0.914117 yard.
Do	Central America	38.874 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

Vol. LV. OCTOBER, 1897. No. 205.

YUKON GOLD REGION: CANADA'S MINING REGULATIONS.

Referring to Department's instruction dated August 11, 1897, I have the honor to inclose herewith copies, in duplicate, of the regulations governing placer mining on the Yukon River, issued by the Canadian Government.

CHARLES E. TURNER,
Consul-General.

OTTAWA, *August 14, 1897.*

REGULATIONS GOVERNING PLACER MINING ALONG THE YUKON RIVER AND ITS TRIBUTARIES IN THE NORTHWEST TERRITORIES.

[Approved by order in council No. 1189, of May 21, 1897, as amended.]

INTERPRETATION.

"Bar diggings" shall mean any part of a river over which the water extends when the water is in its flooded state and which is not covered at low water.

Mines on benches shall be known as "bench diggings," and shall, for the purpose of defining the size of such claims, be excepted from dry diggings.

"Dry diggings" shall mean any mine over which a river never extends.

"Miner" shall mean a male or female over the age of 18, but not under that age.

"Claim" shall mean the personal right of property in a placer mine or diggings during the time for which the grant of such mine or diggings is made.

"Legal post" shall mean a stake standing not less than 4 feet above the ground and squared on four sides for at least 1 foot from the top. Both sides so squared shall measure at least 4 inches across the face. It shall also mean any stump or tree cut off and squared or faced to the above height and size.

"Close season" shall mean the period of the year during which placer mining is generally suspended, the period to be fixed by the gold commissioner in whose district the claim is situated.

"Locality" shall mean the territory along a river (tributary of the Yukon River) and its affluents.

"Mineral" shall include all minerals whatsoever other than coal.

NATURE AND SIZE OF CLAIMS.

(1) "Bar diggings," a strip of land 100 feet wide at high-water mark and thence extending into the river to its lowest water level.

(2) The sides of a claim for bar digging shall be two parallel lines run as nearly as possible at right angles to the stream and shall be marked by four legal posts, one at each end of the claim at or about high-water mark; also, one at each end of the claim at or about the edge of the water. One of the posts at high-water mark shall be legibly marked with the name of the miner and the date upon which the claim was staked.

(3) Dry diggings shall be 100 feet square and shall have placed at each of its four corners a legal post, upon one of which shall be legibly marked the name of the miner and the date upon which the claim was staked.

(4) Creek and river claims shall be 500 feet long, measured in the direction of the general course of the stream, and shall extend in width from base to base of the hill or bench on each side; but when the hills or benches are less than 100 feet apart, the claim may be 100 feet in depth. The sides of a claim shall be two parallel lines run as nearly as possible at right angles to the stream. The sides shall be marked with legal posts at or about the edge of the water and at the rear boundaries of the claim. One of the legal posts at the stream shall be legibly marked with the name of the miner and the date upon which the claim was staked.*

(5) A bench claim shall be 100 feet square, and shall have placed at each of its four corners a legal post, upon which shall be legibly marked the name of the miner and the date upon which the claim was staked.

(6) Entry shall only be granted for alternate claims, the other alternate claims being reserved for the Crown, to be disposed of at public auction or in such manner as may be decided by the Minister of the Interior.

The penalty for trespassing upon a claim reserved for the Crown shall be immediate cancellation by the gold commissioner of any entry or entries which the person trespassing may have obtained, whether by original entry or purchase, for a mining claim, and the refusal by the gold commissioner of the acceptance of any application which the person trespassing may at any time make for a claim. In addition to such penalty, the mounted police, upon a requisition from the gold commissioner to that effect, shall take the necessary steps to eject the trespasser.

(7) In defining the size of claims, they shall be measured horizontally, irrespective of inequalities on the surface of the ground.

(8) If any person or persons shall discover a new mine and such discovery shall be established to the satisfaction of the gold commissioner, a creek and river claim 750 feet in length may be granted.

A new stratum of auriferous earth or gravel situated in a locality where the claims are abandoned shall, for this purpose, be deemed a new mine, although the same locality shall have been previously worked at a different level.

(9) The forms of application for a grant for placer mining and the grant of the same shall be those contained in Forms H and I in the schedule hereto.

(10) A claim shall be recorded with the gold commissioner in whose district it is situated within three days after the location thereof if it is located within 10

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* NOTICE.

DEPARTMENT OF THE INTERIOR,
Ottawa, August 7, 1897.

Clauses 4 and 8 of the regulations governing placer mining on the Yukon River and its tributaries, in the Northwest Territories, are amended by reducing the length of a creek and river claim to 100 feet and the length of a creek and river claim to be granted to the discoverer of a new mine to 200 feet The fee for a renewal of an entry for a claim has been reduced from $100 to $15.

miles of the commissioner's office. One extra day shall be allowed for making such record for every additional 10 miles or fraction thereof.

(11) In the event of the absence of the gold commissioner from his office, entry for a claim may be granted by any person whom he may appoint to perform his duties in his absence.

(12) Entry shall not be granted for a claim which has not been staked by the applicant in person in the manner specified in these regulations. An affidavit that the claim was staked out by the applicant shall be embodied in Form H of the schedule hereto.

(13) An entry fee of $15 shall be charged the first year and an annual fee of $100 for each of the following years. This provision shall apply to locations for which entries have already been granted.

(14) A royalty of 10 per cent on the gold mined shall be levied and collected by officers to be appointed for the purpose, provided the amount so mined and taken from a single claim does not exceed $500 per week. In case the amount mined and taken from any single claim exceeds $500 per week, there shall be levied and collected a royalty of 10 per cent upon the amount so taken out up to $500, and upon the excess, or amount taken from any single claim over $500 per week, there shall be levied and collected a royalty of 20 per cent, such royalty to form part of the consolidated revenue and to be accounted for by the officers who collect the same in due course. The time and manner in which such royalty shall be collected and the persons who shall collect the same shall be provided for by regulations to be made by the gold commissioner.

Default in payment of such royalty, if continued for ten days after notice has been posted upon the claim in respect of which it is demanded or in the vicinity of such claim by the gold commissioner or his agent, shall be followed by cancellation of the claim. Any attempt to defraud the Crown by withholding any part of the revenue thus provided for, by making false statements of the amount taken out, shall be punished by cancellation of the claim in respect of which fraud or false statements have been committed or made. In respect of the facts as to such fraud or false statements or nonpayment of royalty, the decision of the gold commissioner shall be final.

(15) After the recording of a claim, the removal of any post by the holder thereof or by any person acting in his behalf for the purpose of changing the boundaries of his claim shall act as a forfeiture of the claim.

(16) The entry of every holder of a grant for placer mining must be renewed and his receipt relinquished and replaced every year, the entry fee being paid each time.

(17) No miner shall receive a grant of more than one mining claim in the same locality, but the same miner may hold any number of claims by purchase and any number of miners may unite to work their claims in common upon such terms as they may arrange, provided such agreement be registered with the gold commissioner and a fee of $5 paid for each registration.

(18) Any miner or miners may sell, mortgage, or dispose of his or their claims, provided such disposal be registered with, and a fee of $2 paid to, the gold commissioner, who shall thereupon give the assignee a certificate in Form J in the schedule hereto.

(19) Every miner shall, during the continuance of his grant, have the exclusive right of entry upon his own claim for the miner-like working thereof and the construction of a residence thereon, and shall be entitled exclusively to all the proceeds realized therefrom, upon which, however, the royalty prescribed by clause 14 of these regulations shall be payable, but he shall have no surface rights therein; and the gold commissioner may grant to the holders of adjacent claims such right of

entry thereon as may be absolutely necessary for the working of their claims upon such terms as may to him seem reasonable. He may also grant permits to miners to cut timber thereon for their own use upon payment of the dues prescribed by the regulations in that behalf.

(20) Every miner shall be entitled to the use of so much of the water naturally flowing through or past his claim and not already lawfully appropriated as shall, in the opinion of the gold commissioner, be necessary for the due working thereof, and shall be entitled to drain his own claim free of charge.

(21) A claim shall be deemed to be abandoned and open to occupation and entry by any person when the same shall have remained unworked on working days by the grantee thereof or by some person on his behalf for the space of seventy-two hours,* unless sickness or other reasonable cause be shown to the satisfaction of the gold commissioner or unless the grantee is absent on leave given by the commissioner, and the gold commissioner, upon obtaining evidence satisfactory to himself that this provision is not being complied with, may cancel the entry given for a claim.

(22) If the land upon which a claim has been located is not the property of the Crown it will be necessary for the person who applied for entry to furnish proof that he has acquired from the owner of the land the surface rights before entry can be granted.

(23) If the occupier of the land has not received a patent therefor, the purchase money of the surface rights must be paid to the Crown, and a patent of the surface rights will issue to the party who acquired the mining rights. The money so collected will either be refunded to the occupier of the land when he is entitled to a patent therefor or will be credited to him on account of payment for land.

(24) When the party obtaining the mining rights to lands can not make an arrangement with the owner or his agent or the occupant thereof for the acquisition of the surface rights, it shall be lawful for him to give notice to the owner or his agent or the occupier to appoint an arbitrator to act with another arbitrator named by him, in order to award the amount of compensation to which the owner or occupant shall be entitled. The notice mentioned in this section shall be according to a form to be obtained upon application from the gold commissioner for the district in which the lands in question lie, and shall, when practicable, be personally served on such owner, or his agent if known, or occupant; and after reasonable efforts have been made to effect personal service, without success, then such notice shall be served by leaving it at, or sending by registered letter to, the last place of abode of the owner, agent, or occupant. Such notice shall be served upon the owner or agent within a period to be fixed by the gold commissioner before the expiration of the time limited in such notice. If the proprietor refuses or declines to appoint an arbitrator, or when, for any other reason, no arbitrator is appointed by the proprietor in the time limited therefor in the notice provided for by this section, the gold commissioner for the district in which the lands in question lie shall, on being satisfied by affidavit that such notice has come to the knowledge of such owner, agent, or occupant, or that such owner, agent, or occupant willfully evades the service of such notice, or can not be found, and that reasonable efforts have been made to effect such service and that the notice was left at the last place of abode of such owner, agent, or occupant, appoint an arbitrator on his behalf.

(25) (*a*) All the arbitrators appointed under the authority of these regulations shall be sworn before a justice of the peace to the impartial discharge of the duties assigned to them, and they shall forthwith proceed to estimate the reasonable damages which the owner or occupants of such lands, according to their several interests therein, shall sustain by reason of such prospecting and mining operations.

* Seventy-two hours means three consecutive days of twenty-four hours each.

(*b*) In estimating such damages the arbitrators shall determine the value of the land irrespectively of any enhancement thereof from the existence of minerals therein.

(*c*) In case such arbitrators can not agree, they may select a third arbitrator, and when the two arbitrators can not agree upon a third arbitrator, the gold commissioner for the district in which the lands in question lie shall select such third arbitrator.

(*d*) The award of any two such arbitrators made in writing shall be final, and shall be filed with the gold commissioner for the district in which the lands lie.

If any cases arise for which no provision is made in these regulations, the provisions of the regulations governing the disposal of mineral lands other than coal lands, approved by his excellency the governor in council on the 9th of November, 1889, shall apply.

FORM H.

Application for grant for placer mining and affidavit of applicant.

I (or we), ——— ———, of ———, hereby apply, under the Dominion mining regulations, for a grant of a claim for placer mining as defined in the said regulations in (here describe locality) and I (or we) solemnly swear:

(1) That I (or we) have discovered therein a deposit of (here name the metal or mineral).

(2) That I (or we) am (or are), to the best of my (or our) knowledge and belief, the first discoverer (or discoverers) of the said deposit; or,

(3) That the said claim was previously granted to (here name the last grantee), but has remained unworked by the said grantee for not less than ———.

(4) That I (or we) am (or are) unaware that the land is other than vacant Dominion land.

(5) That I (or we) did, on the —— day of ———, mark out on the ground, in accordance in every particular with the provisions of the mining regulations for the Yukon River and its tributaries, the claim for which I (or we) make this application, and that in so doing I (or we) did not encroach on any other claim or mining location previously laid out by any other person.

(6) That the said claim contains, as nearly as I (or we) could measure or estimate, an area of —— square feet, and that the description (and sketch, if any) of this date hereto attached, signed by me (or us), sets (or set) forth in detail, to the best of my (or our) knowledge and ability, its position, form, and dimensions.

(7) That I (or we) make this application in good faith, to acquire the claim for the sole purpose of mining, to be prosecuted by myself (or us) or by myself and associates, or by my (or our) assigns.

Sworn before me at ———, this —— day of ———, 18 .

(Signature.) ——— ———.

FORM I.

Grant for placer mining.

No. ——. DEPARTMENT OF THE INTERIOR,

Agency, ———, *18* .

In consideration of the payment of the fee prescribed by clause 13 of the mining regulations for the Yukon River and its tributaries, by ——— ———, of ———, accompanying his (or their) application No. ——, dated ———, 18 , for a mining claim in (here insert description of locality).

The Minister of the Interior hereby grants to the said ——— ———, for the term of one year from the date hereof, the exclusive right of entry upon the claim (here describe in detail the claim granted) for the miner-like working thereof and the construction of a residence thereon, and the exclusive right to all the proceeds realized therefrom, upon which, however, the royalty prescribed by clause 14 of the regulations shall be paid.

The said ——— ——— shall be entitled to the use of so much of the water naturally flowing through or past his (or their) claim, and not already lawfully appropriated, as shall be necessary for the due working thereof and to drain his (or their) claim, free of charge.

This grant does not convey to the said ——— ——— any surface rights in the said claim or any right of ownership in the soil covered by the said claim; and the said grant shall lapse and be forfeited unless the claim is continuously and in good faith worked by the said ——— ——— or his (or their) associates.

The rights hereby granted are those laid down in the aforesaid mining regulations, and no more, and are subject to all the provisions of the said regulations, whether the same are expressed herein or not.

———— ————,
Gold Commissioner.

FORM J.

Certificate of the assignment of a placer mining claim.

No.——. DEPARTMENT OF THE INTERIOR,
Agency, ———, *18* .

This is to certify that ——— ———, of ———, has (or have) filed an assignment in due form dated ———, 18 , and accompanied by a registration fee of $2, of the grant to ——— ———, of ———, of the right to mine in (insert description of claim) for one year from the ———, 18 .

This certificate entitles the said ——— ——— to all the rights and privileges of the said ——— ——— in respect to the claim assigned, that is to say, to the exclusive right of entry upon the said claim for the miner-like working thereof and the construction of a residence thereon and the exclusive right to all the proceeds realized therefrom (upon which, however, the royalty prescribed by clause 14 of the regulations shall be paid) for the remaining portion of the year for which the said claim was granted to the said ——— ———, that is to say, until the —— day of ———, 18 .

The said ——— ——— shall be entitled to the use of so much of the water naturally flowing through or past his (or their) claim and not already lawfully appropriated as shall be necessary for the due working thereof and to drain the claim free of charge.

This grant does not convey to the said ——— ——— any surface rights in the said claim or any right of ownership in the soil covered by the said claim; and the said grant shall lapse and be forfeited unless the claim is continuously and in good faith worked by the said ——— ——— or his (or their) associates.

The rights hereby granted are those laid down in the Dominion mining regulations, and no more, and are subject to all the provisions of the said regulations, whether the same are expressed herein or not.

———— ————,
Gold Commissioner.

N. B.—The provisions of these regulations are liable to be changed at any time. Copies of the latest regulations may be obtained by applying to the Department of the Interior, Ottawa, Ontario, or to the gold commissioner at Cudahy, Yukon District, Northwest Territories.

TARIFF OF CANADA, 1897.

Following is the text of the new Canadian tariff, with index, as issued from the Customs Department, Ottawa, June 29, 1897:

60-61 VICTORIA.

CHAP. 16.

An Act to consolidate and amend the acts respecting the duties of customs.

[*Assented to 29th June, 1897.*]

Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

Short title. 1. This act may be cited as the customs tariff, 1897.

Interpretation. 2. In this act, and in any other act relating to customs, unless the context otherwise requires,—

"N. e. s." (*a.*) The initials "n. e. s." represent and have the meaning of the words "not elsewhere specified";

"N. o. p." (*b.*) The initials "n. o. p." represent and have the meaning of the words "not otherwise provided for";

"Gallon." (*c.*) The expression "gallon" means an imperial gallon;

"Ton." (*d.*) The expression "ton" means two thousand pounds avedupois;

"Proof" or "proof spirits." (*e.*) The expression "proof" or "proof spirits," when applied to wines or spirits of any kind, means spirits of a strength equal to that of pure ethyl alcohol compounded with distilled water in such proportions that the resultant mixture shall at a temperature of sixty degrees Fahrenheit have a specific gravity of 0.9198 as compared with that of distilled water at the same temperature;

"Gauge." (*f.*) The expression "gauge," when applied to metal sheets or plates or to wire, means the thickness as determined by Stubbs's standard gauge;

"In diameter." (*g.*) The expression "in diameter," when applied to tubing, means the actual inside diameter;

"Sheet." (*h.*) The expression "sheet," when applied to metals, means a sheet or plate not exceeding three-sixteenths of an inch in thickness;

"Plate." (*i.*) The expression "plate," when applied to metals, means a plate or sheet more than three-sixteenths of an inch in thickness.

Interpretation. 3. The expressions mentioned in section two of the customs act, as amended by section two of the customs amendment act, 1888, whenever they occur herein or in any act relating to the customs, unless the context otherwise requires, have the meaning assigned to them respectively by the said sections two; and any power conferred upon the governor in council by the customs act to transfer dutiable goods to the list of goods which may be imported free of duty is not hereby abrogated or impaired.

Saving certain power of governor in council.

Duties in Schedule A imposed. 4. Subject to the provisions of this act and to the requirements of the customs act, chapter thirty-two of the revised stat-

utes, as amended, there shall be levied, collected and paid upon all goods enumerated, referred to as not enumerated, in Schedule A to this act, the several rates of duties of customs set forth and described in the said schedule and set opposite to each item respectively or charged thereon as not enumerated, when such goods are imported into Canada or taken out of warehouse for consumption therein.

Goods free of duty.

5. Subject to the same provisions and to the further conditions contained in Schedule B to this act, all goods enumerated in the said Schedule B may be imported into Canada or may be taken out of warehouse for consumption in Canada without the payment of any duties of customs thereon.

Prohibited goods.

6. The importation into Canada of any goods enumerated, described or referred to in Schedule C to this act, is prohibited; and any such goods imported shall thereby become forfeited to the Crown and shall be destroyed; and any person importing any such prohibited goods, or causing or permitting them to be imported, shall for each offense incur a penalty of two hundred dollars.

Fish, etc., to be free when free in United States and Newfoundland.

7. The whole or part of the duties hereby imposed upon fish and other products of the fisheries may be remitted as respects either the United States or Newfoundland, or both, upon proclamation of the governor in council, which may be issued whenever it appears to his satisfaction that the governments of the United States and Newfoundland, or either of them, have made changes in their tariffs of duties imposed upon articles imported from Canada, in reduction or repeal of the duties in force in the said countries respectively.

Export of game prohibited.

8. The export of deer, wild turkeys, quail, partridge, prairie fowl and woodcock, in the carcase or parts thereof, is hereby declared unlawful and prohibited; and any person exporting or attempting to export any such article shall for each such offense incur a penalty of one hundred dollars, and the article so attempted to be exported shall be forfeited, and may, on reasonable cause of suspicion of intention to export, be seized by any officer of the customs, and, if such intention is proved, shall be dealt with as for breach of the customs laws: Provided, that this section shall not apply to the export, under such regulations as are made by the governor in council, of any carcase or part thereof of any deer raised or bred by any person, company or association of persons upon his or their own lands.

As to export of carcase of certain deer.

Molasses and sirups, determination of duty on.

9. Regulations respecting the manner in which molasses and sirups shall be sampled and tested for the purpose of determining the classes to which they belong with reference to the duty chargeable thereon shall be made by the controller of customs, and the instruments and appliances necessary for such determination shall be designated by him and supplied to such officers as are by him charged with the duty of sampling and testing such molasses and sirups; and the decision of any officer (to whom is so assigned the testing of such articles) as to the duties to which they are subject under the tariff shall be final and conclusive, unless, upon appeal to the commissioner of customs within thirty days from the rendering of such decision, such

decision is, with the approval of the controller, changed; and the decision of the commissioner with such approval shall be final.

Wines, spirits, etc., determination of duty on.

10. In the case of all wines, spirits, or alcoholic liquors subject to duty according to their relative strength of proof, such strength shall be ascertained either by means of Sykes's hydrometer or of the specific gravity bottle, as the controller of customs directs; and in case such relative strength can not be correctly ascertained by the direct use of the hydrometer or gravity bottle, it shall be ascertained by the distillation of a sample and the subsequent test in like manner of the distillate.

Value for duty of medicinal or toilet preparations imported for certain purposes.

11. All medicinal or toilet preparations imported for completing the manufacture thereof, or for the manufacture of any other article by the addition of any ingredient or ingredients, or by mixing such preparations, or by putting up or labeling the same, alone or with other articles or compounds under any proprietary or special name or trade-mark, shall be valued for duty under the provisions of subsection two of section sixty-five of the customs act, as amended by section fifteen of chapter fourteen of the statutes of 1888.

Medicinal preparations to be labeled, etc.

12. All medicinal preparations, whether chemical or other, usually imported with the name of the manufacturer, shall have the true name of such manufacturer and the place where they are prepared, and the word "alcoholic" or "nonalcoholic," permanently and legibly affixed to each parcel by stamp, label or otherwise; and all medicinal preparations imported without such names and word so affixed may be forfeited.

Packages.

13. Packages shall be subject to the following provisions:—

(*a.*) All bottles, flasks, jars, demijohns, carboys, casks, hogsheads, pipes, barrels, and all other vessels or packages, manufactured of tin, iron, lead, zinc, glass or any other material capable of holding liquids, and all packages in which goods are commonly placed for home consumption, including cases, not otherwise provided for, in which bottled spirits, wines or malt liquors or other liquids are contained, and every package being the first receptacle or covering inclosing goods for the purpose of sale, shall in all cases, not otherwise provided for, in which they contain goods subject to an ad valorem duty or a specific and ad valorem duty, be charged with the same rate of ad valorem duty as is to be levied and collected on the goods they contain, and the value of the packages may be included in the value of such goods;

(*b.*) All such packages as aforesaid containing goods subject to a specific duty only, and not otherwise provided for, shall be charged with a duty of twenty per cent ad valorem;

(*c.*) Packages not hereinbefore specified, and not herein specially charged with or declared liable to duty, and being the usual and ordinary packages in which goods are packed for exportation, according to the general usage and custom of trade, shall be free of duty;

(*d.*) All such special packages or coverings as are of any use, or apparently designed for use other than in the importation of the goods they contain, shall be subject to the same rate of duty

as would therein be levied if imported empty or separate from their contents;

(*c.*) Packages (inside or outside) containing free goods shall be exempt from duty when the packages are of such a nature that their destruction is necessary in order to release the goods.

Penalty for having blank invoice with certificate of correctness.

14. Any person who, without lawful excuse, the proof of which shall be on the person accused, sends or brings into Canada, or who, being in Canada, has in his possession, any billheading or other paper appearing to be a heading or blank capable of being filled up and used as an invoice, and bearing any certificate purporting to show, or which may be used to show, that the invoice which may be made from such billheading or blank is correct or authentic, is guilty of an indictable offense and liable to a penalty of five hundred dollars, and to imprisonment for a term not exceeding twelve months, in the discretion of the court, and the goods entered under any invoice made from any such billheading or blank shall be forfeited.

Affidavit of importer claiming lower rate of duty on certain goods.

15. With respect to goods imported for manufacturing purposes that are admissible under this act for any specific purposes at a lower rate of duty than would otherwise be chargeable, or exempt from duty, the importer claiming such exemption from duty, or proportionate exemption from duty, shall make and subscribe to the following affidavit or affirmation before the collector of customs at the port of entry, or before a notary public or a commissioner for taking affidavits:

I, (name of importer) the undersigned, importer of the (names of the goods or articles) mentioned in this entry, do solemnly (swear or affirm) that such (names of the goods or articles) are imported by me for the manufacture of (names of the goods to be manufactured) in my own factory, situated at (name of the place, county and province), and that no portion of the same will be used for any other purpose or disposed of until so manufactured.

1894, c. 2, 1894, c. 3.

16. Nothing contained in the foregoing provisions shall affect the French treaty act, 1894, or chapter three of the statutes of 1895, intituled an act respecting commercial treaties affecting Canada.

Reciprocal tariff.

17. When the customs tariff of any country admits the products of Canada on terms which, on the whole, are as favorable to Canada as the terms of the reciprocal tariff herein referred to are to the countries to which it may apply, articles which are the growth, produce, or manufacture of such country, when imported direct therefrom, may then be entered for duty, or taken out of warehouse for consumption in Canada, at the reduced rates of duty provided in the reciprocal tariff set forth in Schedule D to this act.

Question as to its application.

2. Any question arising as to the countries entitled to the benefits of the reciprocal tariff shall be decided by the controller of customs, subject to the authority of the governor in council.

Application by virtue of treaty.

3. The governor in council may extend the benefits of the reciprocal tariff to any country entitled thereto by virtue of a treaty with Her Majesty.

Regulations.

4. The controller of customs may make such regulations as are necessary for carrying out the intention of this section.

Trusts and combines, commissioners to inquire into.

18. Whenever the governor in council has reason to believe that with regard to any article of commerce there exists any trust, combination, association, or agreement of any kind among manufacturers of such articles or dealers therein, to unduly enhance the price of such article or in any other way to unduly promote the advantage of the manufacturers or dealers at the expense of the consumers, the governor in council may commission or empower any judge of the supreme court or exchequer court of Canada, or of any superior court in any province of Canada, to inquire in a summary way into and report to the governor in council whether such trust, combination, association or agreement exists.

Powers of commissioner.

2. The judge may compel the attendance of witnesses and examine them under oath and require the production of books and papers, and shall have such other necessary powers as are conferred upon him by the governor in council for the purposes of such inquiry.

His report, and action thereupon.

3. If the judge reports that such trust, combination, association or agreement exists, and if it appears to the governor in council that such disadvantage to the consumers is facilitated by the duties of customs imposed on a like article, when imported, then the governor in council shall place such article on the free list, or so reduce the duty on it as to give to the public the benefit of reasonable competition in such article.

Repeal: 1894, c. 33. 1895, c. 24. 1896, c. 8.

19. The following acts are hereby repealed:—The customs tariff, 1894, being chapter thirty-three of the statutes of 1894; chapter twenty-three of the statutes of 1895, intituled an act to amend the customs tariff, 1894; and chapter eight of the statutes of 1896, intituled an act further to amend the customs tariff, 1894.

Repeal of orders in council, etc.

20. All orders in council and all departmental regulations inconsistent with any of the provisions of this act are hereby repealed.

Foregoing provisions deemed to take effect on 23rd April, 1897.

21. The foregoing provisions of this act shall be held to have come into force on the twenty-third day of April, in the present year one thousand eight hundred and ninety-seven, and to apply and to have applied to all goods imported or taken out of warehouse for consumption on or after the said day: Provided, that in the case of goods which were imported or taken out of warehouse for consumption, and on which duty was paid, on or after the twenty-third day of April, one thousand eight hundred and ninety-seven, in accordance with the rate of duty set forth as payable on such goods in the resolutions respecting the duties of customs introduced in the House of Commons on the twenty-second day of the said month, or in any such resolutions subsequently introduced in the said House, the duty so paid shall not be affected, nor shall the person paying it be entitled to any refund or be liable to any further payment of duty, by reason of such rate of duty being altered by any resolution introduced subsequently to that in accordance with which such duty was paid and before the passing of this act.

Proviso: as to change of duty after that day and before passing of this act.

SCHEDULE A.

GOODS SUBJECT TO DUTIES.

Ales, beers, wines and liquors.

1. Ale, beer and porter, when imported in casks or otherwise than in bottle, sixteen cents per gallon..... 16c. p. gall.
2. Ale, beer and porter, when imported in bottles (six quart or twelve pint bottles to be held to contain one gallon), twenty-four cents per gallon..... 24c. p. gall.
3. Cider, not clarified or refined, five cents per gallon..... 5c. p. gall.
4. Cider, clarified or refined, ten cents per gallon..... 10c. p. gall.
5. Lime juice and fruit juices, fortified with or containing not more than twenty-five per cent of proof spirits, sixty cents per gallon; and when containing more than twenty-five per cent of proof spirits, two dollars per gallon..... 60c. p. gall. $2 p. gall.
6. Lime juice and other fruit sirups and fruit juices, n. o. p., twenty per cent ad valorem ..... 20 p. c.
7. Spirituous or alcoholic liquors, distilled from any material, or containing or compounded from or with distilled spirits of any kind, and any mixture thereof with water, for every gallon thereof of the strength of proof, and when of a greater strength than that of proof, at the same rate on the increased quantity that there would be if the liquors were reduced to the strength of proof. When the liquors are of a less strength than that of proof, the duty shall be at a rate herein provided, but computed on a reduced quantity of the liquors in proportion to the lesser degree of strength; provided, however, that no reduction in quantity shall be computed or made on any liquors below the strength of fifteen per cent under proof, but all such liquors shall be computed as of the strength of fifteen per cent under proof, as follows:—

   (*a.*) Ethyl alcohol, or the substance commonly known as alcohol, hydrated oxide of ethyl or spirits of wine; gin of all kinds, n. e. s.; rum, whisky and all spirituous or alcoholic liquors, n. o. p.; amyl alcohol or fusel oil, or any substance known as potato spirit or potato oil; methyl alcohol, wood alcohol, wood naphtha, pyroxylic spirit or any substance known as wood spirit or methylated spirits, absinthe, arrack or palm spirit, brandy, including artificial brandy and imitations of brandy; cordials and liqueurs of all kinds, n. e. s.; mescal, pulque, rum shrub, schiedam and other schnapps; tafia, angostura and similar alcoholic bitters or beverages, two dollars and forty cents per gallon..... $2.40 p. gall.

   (*b.*) Spirits and strong waters of any kind, mixed with any ingredient or ingredients, as being or known or designated as anodynes, elixirs, essences, extracts, lotions, tinctures or medicines, or medicinal wines (so called), or ethereal and spirituous fruit essences, n. e. s., two dollars and forty cents per gallon and thirty per cent ad valorem..... $2.40 p. gall. and 30 p. c.

   (*c.*) Alcoholic perfumes and perfumed spirits, bay rum, cologne and lavender waters, hair, tooth and skin washes, and

7. Spirituous or alcoholic liquors, etc.—Continued.	
other toilet preparations containing spirits of any kind, when in bottles or flasks containing not more than four ounces each, fifty per cent ad valorem	50 p. c.
When in bottles, flasks or other packages, containing more than four ounces each, two dollars and forty cents per gallon and forty per cent ad valorem	$2.40 p. gall. and 40 p. c.
(*d.*) Nitrous ether, sweet spirits of niter and aromatic spirits of ammonia, two dollars and forty cents per gallon and thirty per cent ad valorem	$2.40 p. gall. and 30 p. c.
(*e.*) Vermouth containing not more than thirty-six per cent, and ginger wine containing not more than twenty-six per cent of proof spirits, ninety cents per gallon	90c. p. gall.
If containing more than these percentages respectively of proof spirits, two dollars and forty cents per gallon	$2.40 p. gall.
(*f.*) Medicinal or medicated wines containing not more than forty per cent of proof spirits, one dollar and fifty cents per gallon	$1.50 p. gall.
8. Wines of all kinds, except sparkling wines, including orange, lemon, strawberry, raspberry, elder and currant wines, containing twenty-six per cent or less of spirits of the strength of proof, whether imported in wood or in bottles (six quart or twelve pint bottles to be held to contain a gallon), twenty-five cents per gallon; and for each degree or fraction of a degree of strength in excess of the twenty-six per cent of spirits as aforesaid, an additional duty of three cents until the strength reaches forty per cent of proof spirits; and in addition thereto, thirty per cent ad valorem	25c. p. gall. 3c. p. deg. 30 p. c.
9. Champagne and all other sparkling wines in bottles containing each not more than a quart but more than a pint, three dollars and thirty cents per dozen bottles; containing not more than a pint each, but more than one-half pint, one dollar and sixty-five cents per dozen bottles; containing one-half pint each or less, eighty-two cents per dozen bottles; bottles containing more than one quart each shall pay, in addition to three dollars and thirty cents per dozen bottles, at the rate of one dollar and sixty-five cents per gallon on the quantity in excess of one quart per bottle, the quarts and pints in each case being old wine measure; in addition to the above specific duty there shall be an ad valorem duty of thirty per cent	$3.30 p. doz. $1.65 p. doz. 82c. p. doz. $1.65 p. gall. 30 p. c.
10. But any liquors imported under the name of wine, and containing more than forty per cent of spirits of the strength of proof shall be rated for duty as unenumerated spirits.	
Animals, and agricultural, animal and dairy products.	
11. Animals, living, n. e. s., twenty per cent ad valorem	20 p. c.
12. Live hogs, one and one-half cent per pound	1½c. per lb.
13. Meats, n. e. s. (when in barrel, the barrel to be free), two cents per pound	2c. per lb.
14. Meats, fresh, n. e. s., three cents per pound	3c. per lb.
15. Canned meats, and canned poultry and game, extracts of meats and fluid beef not medicated, and soups, twenty-five per cent ad valorem	25 p. c.

16. Mutton and lamb, fresh, thirty-five per cent ad valorem..... 35 p. c.
17. Poultry and game, n. o. p., twenty per cent ad valorem..... 20 p. c.
18. Lard, lard compound and similar substances, cottolene and animal stearin, of all kinds, n. e. s., two cents per pound..... 2c. per lb.
19. Tallow and stearic acid, twenty per cent ad valorem..... 20 p. c.
20. Beeswax, ten per cent ad valorem..... 10 p. c.
21. Candles, n. e. s., twenty-five per cent ad valorem..... 25 p. c.
22. Paraffin wax candles, thirty per cent ad valorem..... 30 p. c.
23. Soap, common or laundry, one cent per pound..... 1c. p. lb.
24. Castile soap, mottled or white, two cents per pound..... 2c. p. lb.
25. Soap, n. e. s., thirty-five per cent ad valorem..... 35 p. c.
26. Pearline and other soap powders, thirty per cent ad valorem..... 30 p. c.
27. Glue, liquid, powdered or sheet, and mucilage, gelatin, and isinglass, twenty-five per cent ad valorem..... 25 p. c.
28. Feathers, undressed, twenty per cent ad valorem..... 20 p. c.
29. Feathers, n. e. s., thirty per cent ad valorem..... 30 p. c.
30. Eggs, three cents per dozen..... 3c. p. doz.
31. Butter, four cents per pound..... 4c. p. lb.
32. Cheese, three cents per pound..... 3c. p. lb.
33. Condensed milk (weight of the package to be included in the weight for duty), three and one-quarter cents per pound..... 3¼c. p. lb.
34. Condensed coffee with milk, milk foods and all similar preparations, thirty per cent ad valorem..... 30 p. c.
35. Apples, including the duty on the barrel, forty cents per barrel.. 40c. p. brl.
36. Beans, fifteen cents per bushel..... 15c. p. bush.
37. Buckwheat, ten cents per bushel..... 10c. p. bush.
38. Pease, n. e. s., ten cents per bushel..... 10c. p. bush.
39. Potatoes, n. e. s., fifteen cents per bushel..... 15c. p. bush.
40. Rye, ten cents per bushel..... 10c. p. bush.
41. Rye flour, including the duty on the barrel, fifty cents per barrel.. 50c. p. brl.
42. Hay, two dollars per ton..... $2 p. ton.
43. Vegetables, n. o. p., twenty-five per cent ad valorem..... 25 p. c.
44. Barley, thirty per cent ad valorem..... 30 p. c.
45. Dutiable breadstuffs, grain and flour and meal of all kinds, when damaged by water in transit, twenty per cent ad valorem on the appraised value, such appraised value to be ascertained as provided by sections 58, 70, 71, 72, 73, 74, 75 and 76 of the customs act..... 20 p. c.
46. Buckwheat, meal or flour, one-fourth of one cent per pound..... ¼c. p. lb.
47. Corn meal, including the duty on the barrel, twenty-five cents per barrel..... 25c. p. brl.
48. Indian corn for purposes of distillation, subject to regulations to be approved by the governor in council, seven and one-half cents per bushel..... 7½c. p. bush.
49. Oats, ten cents per bushel..... 10c. p. bush.
50. Oatmeal, twenty per cent ad valorem..... 20 p. c.
51. Rice, uncleaned, unhulled or paddy, one-half cent per lb..... ½c. p. lb.
52. Rice, cleaned, one and one-quarter cent per pound..... 1¼c. p. lb.
53. Rice and sago flour and sago, and tapioca, twenty-five per cent ad valorem..... 25 p. c.
54. Rice, when imported by makers of rice starch for use in their factories in making starch, three-fourths of one cent per pound.. ¾c. p. lb.
55. Wheat, twelve cents per bushel..... 12c. p. bush.

56. Wheat flour, including the duty on the barrel, sixty cents per barrel ..... 60c. p. brl.
57. Biscuits not sweetened, twenty-five per cent ad valorem..... 25 p. c.
58. Biscuits, sweetened, twenty-seven and one-half per cent ad valorem ..... 27½ p. c.
59. Macaroni and vermicelli, twenty-five per cent ad valorem..... 25 p. c.
60. Starch, including farina, corn starch or flour and all preparations having the qualities of starch, the weight of the package to be in all cases included in the weight for duty, one and one-half cent per pound..... 1½c. p. lb.
61. Seeds, viz.:—garden, field and other seeds for agricultural or other purposes, n. o. p., sunflower, canary, hemp and millet seed, when in bulk or in large parcels, ten per cent ad valorem.. 10 p. c.
When put up in small papers or parcels, twenty-five per cent ad valorem ..... 25 p. c.
62. Mustard, ground, twenty-five per cent ad valorem..... 25 p. c.
63. Mustard cake, fifteen per cent ad valorem..... 15 p. c.
64. Sweet potatoes and yams, ten cents per bushel..... 10c. p. bush.
65. Tomatoes, fresh, twenty cents per bushel and ten per cent ad valorem..... 20c. p. bush. and 10 p. c.
66. Tomatoes and other vegetables, including corn and baked beans, in cans or other packages, n. e. s., the weight of the cans or other packages to be included in the weight for duty, one and one-half cent per pound..... 1½c. p. lb.
67. Pickles, sauces and catsups, including soy, thirty-five per cent ad valorem..... 35 p. c.
68. Malt, upon entry for warehouse subject to excise regulations, fifteen cents per bushel..... 15c. p. bush.
69. Extract of malt (nonalcoholic), for medicinal and baking purposes, twenty-five per cent ad valorem..... 25 p. c.
70. Hops, six cents per pound..... 6c. p. lb.
71. Compressed yeast, in bulk or mass of not less than fifty pounds, three cents per lb; in packages weighing less than fifty pounds, 3c. p. lb. six cents per pound; the weight of the package in the latter case to be included in the weight for duty..... 6c. p. lb.
72. Yeast cakes and baking powder, the weight of the packages to be included in the weight for duty, six cents per pound..... 6c. p. lb.
73. Trees, viz.:—apple, cherry, peach, pear, plum and quince, of all kinds, and small peach trees known as June buds, three cents each..... 3c. each.
74. Grape vines, gooseberry, raspberry, currant and rose bushes; fruit plants, n. e. s., and shade, lawn and ornamental trees, shrubs and plants, n. e. s., twenty per cent ad valorem..... 20 p. c.
75. Blackberries, gooseberries, raspberries, strawberries, cherries and currants, n. e. s., the weight of the package to be included in the weight for duty, two cents per pound..... 2c. p. lb.
76. Cranberries, plums and quinces, twenty-five per cent ad valorem.. 25 p. c.
77. Prunes, including raisins, dried currants, and California or silver prunes, one cent per pound..... 1c. p. lb.
78. Apples, dried, desiccated or evaporated; dates, figs, and other dried, desiccated or evaporated fruits, n. e. s., twenty-five per cent ad valorem..... 25 p. c.
79. Grapes, two cents per pound..... 2c. p. lb.

80. Oranges, lemons and limes, in boxes of capacity not exceeding two and one-half cubic feet, twenty-five cents per box..... 25c. p. box.
In one-half boxes, capacity not exceeding one and one-fourth cubic foot, thirteen cents per half box..... 13c. p. ½ box.
In cases and all other packages, per cubic foot holding capacity, ten cents..... 10c. p. cub. ft.
In bulk, per one thousand oranges, lemons or limes, one dollar and fifty cents..... $1.50 p. M.
In barrels, not exceeding in capacity that of the one hundred and ninety-six pounds flour barrel, fifty-five cents per barrel..... 55c. p. brl.
81. Peaches, n. o. p., the weight of the package to be included in the weight for duty, one cent per pound..... 1c. p. lb.
82. Fruits in air-tight cans or other packages, the weight of the cans or other packages to be included in the weight for duty, two and one-quarter cents per pound..... 2¼c. p. lb.
83. Fruits preserved in brandy, or preserved in other spirits, two dollars per gallon..... $2 p. gall.
84. Preserved ginger, thirty per cent ad valorem..... 30 p. c.
85. Jellies, jams and preserves, n. e. s., three and one-quarter cents per pound..... 3¼c. p. lb.
86. Honey, in the comb or otherwise, and imitations thereof, three cents per pound..... 3c. p. lb.
87. Tea and green coffee, n. e. s., ten per cent ad valorem..... 10 p. c.
88. Coffee, roasted or ground, when not imported direct from the country of growth and production, two cents per pound and ten per cent ad valorem..... 2c. p. lb. and 10 p. c.
89. Coffee, roasted or ground, and all imitations thereof and substitutes therefor, including acorn nuts, n. o. p., two cents per pound..... 2c. p. lb.
90. Extract of coffee, n. e. s., or substitutes therefor of all kinds, three cents per pound..... 3c. p. lb.
91. Chicory, raw or green, three cents per pound..... 3c. p. lb.
92. Chicory, kiln-dried, roasted or ground, four cents per pound..... 4c. p. lb.
93. Cocoa shells and nibs, chocolate, and other preparations of cocoa n. e. s., twenty per cent ad valorem..... 20 p. c.
94. Cocoa paste, chocolate paste, cocos and cocoa butter, n. o. p., four cents per pound..... 4c. p. lb.
95. Nuts, shelled, n. e. s., five cents per pound..... 5c. p. lb.
96. Almonds, walnuts, Brazil nuts, pecans and shelled peanuts, n. e. s., three cents per pound..... 3c. p. lb.
And nuts of all kinds, n. o. p., two cents per pound..... 2c. p. lb.
97. Cocoanuts, n. e. s., one dollar per hundred..... $1 p. 100.
98. Cocoanuts, when imported from the place of growth, by vessel, direct to a Canadian port, fifty cents per hundred..... 50c. p. 100.
99. Cocoanut, desiccated, sweetened or not, five cents per pound..... 5c. p. lb.
100. Nutmegs and mace, twenty-five per cent ad valorem..... 25 p. c.
101. Spices, viz.:—ginger and spices of all kinds, unground, n. e. s., twelve and one-half per cent ad valorem..... 12½ p. c.
Ground, twenty-five per cent ad valorem..... 25 p. c.
102. Fine salt in bulk, and coarse salt, n. e. s., five cents per one hundred pounds..... 5c. p. 100 lbs.
103. Salt, n. e. s., in bags, barrels and other packages,—the bags, barrels or other packages, being the first coverings or inside

packages, to bear the same duty as if such packages or first coverings were imported empty,—seven and one-half cents per hundred pounds..... 7½c. p. 100 lbs.

Fish and products of the fisheries.

104. Mackerel, one cent per pound..... 1c. p. lb.
105. Herrings, pickled or salted, one-half cent per pound..... ½c. p. lb.
106. Salmon, fresh, one-half cent per pound..... ½c. p. lb.
107. Salmon, pickled or salted, one cent per pound..... 1c. p. lb.
108. All other fish, pickled or salted, in barrels, one cent per pound.. 1c. p. lb.
109. Foreign-caught fish, imported otherwise than in barrels or half-barrels, whether fresh, dried, salted or pickled, not specially enumerated or provided for by this act, fifty cents per hundred pounds..... 50c. p. 100 lbs.
110. Fish, smoked and boneless, one cent per pound..... 1c. p. lb.
111. Anchovies and sardines, packed in oil or otherwise, in tin boxes measuring not more than five inches long, four inches wide and three and a half inches deep, per whole box, five cents... 5c. p. box.
(*b.*) In half boxes measuring not more than five inches long, four inches wide and one and five-eighths deep, per half box, two and one-half cents..... 2½c. p. ½ box.
(*c.*) In quarter boxes, measuring not more than four inches and three-quarters long, three and a half inches wide and one and a quarter deep, per quarter box, two cents..... 2c. p. ¼ box.
112. Anchovies and sardines when imported in any other form, thirty per cent ad valorem..... 30 p. c.
113. Fish preserved in oil, except anchovies and sardines, thirty per cent ad valorem..... 30 p. c.
114. Fresh or dried fish, n. e. s., imported in barrels, or half barrels, one cent per pound..... 1c. p. lb.
115. Salmon and all other fish prepared or preserved, including oysters, not specially enumerated or provided for in this act, twenty-five per cent ad valorem..... 25 p. c.
116. Oysters, shelled, in bulk, ten cents per gallon..... 10c. p. gall.
117. Oysters, shelled, in cans not over one pint, three cents per can, including the cans..... 3c. p. can.
118. Oysters, shelled, in cans over one pint and not over one quart, five cents per can, including the cans..... 5c. p. can.
119. Oysters, shelled, in cans exceeding one quart in capacity, an additional duty of five cents for each quart or fraction of a quart of capacity over a quart, including the cans..... 5c. p. quart.
120. Oysters in the shell, twenty-five per cent ad valorem..... 25 p. c.
121. Packages containing oysters or other fish, n. o. p., twenty-five per cent ad valorem..... 25 p. c.
122. Oils, spermaceti, whale and other fish oils, and all other articles the produce of the fisheries not specially provided for, twenty per cent ad valorem..... 20 p. c.

Books and paper.

123. Albumenized and other papers and films chemically prepared for photographers' use, thirty per cent ad valorem..... 30 p. c.
124. Books, viz.:—Novels or works of fiction, or literature of a similar character, unbound or paper bound or in sheets, including

freight rates for railways and telegraph rates, bound in book or pamphlet form, but not to include Christmas annuals or publications commonly known as juvenile and toy books, twenty per cent ad valorem..... 20 p. c.

125. Books, printed, periodicals and pamphlets, or parts thereof n. e. s.,—not to include blank account books, copy books, or books to be written or drawn upon, ten per cent ad valorem. 10 p. c.

126. Advertising and printed matter, viz.:—Advertising pamphlets, advertising pictorial show cards, illustrated advertising periodicals; illustrated price books, catalogues and price lists, advertising almanacs and calendars; patent medicine or other advertising circulars, fly sheets or pamphlets; advertising chromos, chromotypes, oleographs or like work produced by any process other than hand painting or drawing, and having any advertisement or advertising matter printed, lithographed or stamped thereon, or attached thereto, including advertising bills, folders and posters, or other similar artistic work, lithographed, printed or stamped on paper or cardboard for business or advertisement purposes, n. o. p., fifteen cents per pound..... 15c. p. lb.

127. Labels for cigar boxes, fruits, vegetables, meats, fish, confectionery or other goods or wares; shipping, price or other tags, tickets or labels, and railroad or other tickets, whether lithographed or printed, or partly printed, n. e. s., thirty-five per cent ad valorem..... 35 p. c.

128. Bank notes, bonds, bills of exchange, checks, promissory notes, drafts and all similar work, unsigned, and cards or other commercial blank forms printed or lithographed, or printed from steel or copper or other plates, and other printed matter, n. e. s., thirty-five per cent ad valorem..... 35 p. c.

129. Printed music, bound or in sheets, ten per cent ad valorem..... 10 p. c.

130. Photographs, chromos, chromotypes, artotypes, oleographs, paintings, drawings, pictures, engravings or prints, or proofs therefrom, and similar works of art, n. o. p.; blue prints, building plans, maps and charts, n. e. s., twenty per cent ad valorem ..... 20 p. c.

131. Newspapers or supplemental editions or parts thereof, partly printed and intended to be completed and published in Canada, twenty-five per cent ad valorem..... 25 p. c.

132. Union collar cloth paper in rolls or sheets, not glossed or finished, fifteen per cent ad valorem..... 15 p. c.

133. Union collar cloth paper in rolls or sheets, glossed or finished, twenty per cent ad valorem..... 20 p. c.

134. Millboard, not straw board, ten per cent ad valorem..... 10 p. c.

135. Straw board, in sheets or rolls; tarred paper, felt or straw board; sandpaper, glass or flint paper, and emery paper or emery cloth, twenty-five per cent ad valorem.. ..... 25 p. c.

136. Paper sacks or bags of all kinds, printed or not, twenty-five per cent ad valorem..... 25 p. c.

137. Playing cards, six cents per pack..... 6c. p. pack.

138. Paper hangings or wall papers, borders or bordering, and window blinds of paper of all kinds, thirty-five per cent ad valorem..... 35 p. c.

139. Printing paper and paper of all kinds, n. e. s., twenty-five per cent ad valorem..... 25 p. c.

140. Ruled and border and coated papers, papeteries, boxed papers, pads not printed, papier-maché, ware, n. o. p.; envelopes, and all manufactures of paper, n. e. s., thirty-five per cent ad valorem..... 35 p. c.

Chemicals and drugs.

141. Acid, acetic acid and pyroligneous, n. e. s., and vinegar, a specific duty of fifteen cents for each gallon of any strength not exceeding the strength of proof, and for each degree of strength in excess of the strength of proof an additional duty of two cents..... 15c. p. gall. 2c. p. deg.

The strength of proof shall be held to be equal to six per cent of absolute acid, and in all cases the strength shall be determined in such manner as is established by the governor in council.

142. Acid, acetic and crude, and pyroligneous crude, of any strength not exceeding thirty per cent, twenty-five per cent ad valorem..... 25 p. c.

143. Acid, muriatic and nitric, and all mixed or other acids, n. e. s., twenty per cent ad valorem..... 20 p. c.

144. Acid, sulphuric, twenty-five per cent ad valorem..... 25 p. c.

145. Acid phosphate, n. o. p., twenty-five per cent ad valorem..... 25 p. c.

146. Sulphuric ether, chloroform, and solutions of peroxides of hydrogen, twenty-five per cent ad valorem..... 25 p. c.

147. All medicinal, chemical and pharmaceutical preparations, when compounded of more than one substance, including patent and proprietary preparations, tinctures, pills, powders, troches, lozenges, sirups, cordials, bitters, anodynes, tonics, plasters, liniments, salves, ointments, pastes, drops, waters, essences and oils, n. o. p.; provided that drugs, pill mass and preparations, not including pills or medicinal plasters, recognized by the British or the United States pharmacopœia or the French Codex as officinal, shall not be held to be covered by this item; all liquids, containing alcohol, fifty per cent ad valorem; and all others, liquid or not, twenty-five per cent ad valorem..... 50 p. c. 25 p. c.

148. Pomades, French or flower odors preserved in fat or oil for the purpose of conserving the odors of flowers which do not bear the heat of distillation, when imported in tins of not less than ten pounds each, fifteen per cent ad valorem..... 15 p. c.

149. Perfumery, including toilet preparations (nonalcoholic), viz.:—
Hair oils, tooth and other powders and washes, pomatums, pastes and all other perfumed preparations, n. o. p., used for the hair, mouth or skin, thirty per cent ad valorem..... 30 p. c.

150. Licorice paste and licorice in rolls and sticks, twenty per cent ad valorem..... 20 p. c.

151. Paraffin wax, thirty per cent ad valorem..... 30 p. c.

152. Antiseptic surgical dressing, such as absorbent cotton, cotton wool, lint, lamb's wool, tow, jute, gauzes and oakum, prepared for use as surgical dressings, plain or medicated; surgical belts and trusses, electric belts, pessaries and suspensory bandages of all kinds, twenty per cent ad valorem..... 20 p. c.

153. Surgical and dental instruments (not being furniture) and surgical needles, ten per cent ad valorem until 1st January, 1898; thereafter free ..... 10 p. c.
154. Cod-liver oil, twenty per cent ad valorem ..... 20 p. c.

Opium.

155. Opium, crude, the outward ball or covering to be free of duty, one dollar per pound ..... $1 p. lb.
156. Opium, powdered, one dollar and thirty-five cents per pound... $1.35 p. lb.
157. Opium, prepared for smoking, five dollars per pound ..... $5 p. lb.

Colors, paints, oils, varnishes, etc.

158. Dry white and red lead, orange mineral and zinc white, five per cent ad valorem ..... 5 p. c.
159. Ochers, ochrey earths, raw siennas, and colors, dry, n. e. s., twenty per cent ad valorem ..... 20 p. c.
160. Oxides, umbers, burnt siennas, and fireproofs, n. e. s.; laundry bluing of all kinds, rough stuff and dry and liquid fillers, anti-corrosive and antifouling paints commonly used for ships' hulls, and ground and liquid paints, n. e. s., twenty-five per cent ad valorem ..... 25 p. c.
161. Paints and colors, ground in spirits, and all spirit varnishes and lacquers, one dollar and twelve and one-half cents per gallon ..... $1.12½ p. gall.
162. Paris green, dry, ten per cent ad valorem ..... 10 p. c.
163. Ink for writing, twenty per cent ad valorem ..... 20 p. c.
164. Blacking, shoe, and shoemakers' ink; shoe, harness and leather dressing, harness soap, and knife or other polish or composition, n. o. p., twenty-five per cent ad valorem ..... 25 p. c.
165. Putty, of all kinds, twenty per cent ad valorem ..... 20 p. c.
166. Turpentine, spirits of, five per cent ad valorem ..... 5 p. c.
167. British gum, dextrin, sizing cream and enamel sizing, ten per cent ad valorem ..... 10 p. c.
168. Varnishes, lacquers, japans, japan driers, liquid driers, and oil finish, n. e. s., twenty cents per gallon and twenty per cent ad valorem ..... 20c. p. gall. and 20 p. c.
169. Linseed or flax seed oil, raw or boiled, lard oil, neat's-foot oil, and sesame seed oil, twenty-five per cent ad valorem ..... 25 p. c.
170. Illuminating oils composed wholly or in part of the products of petroleum, coal, shale or lignite, costing more than thirty cents per gallon, twenty-five per cent ad valorem ..... 25 p. c.
171. Lubricating oils, composed wholly or in part of petroleum, costing less than twenty-five cents per gallon, five cents per gallon.. 5c. per gall.
172. Crude petroleum, fuel and gas oils (other than naphtha, benzine or gasoline) when imported by manufacturers (other than oil refiners) for use in their own factories for fuel purposes or for the manufacture of gas, two and one-half cents per gallon ... 2½c. p. gall.
173. Oils, coal and kerosene distilled, purified or refined, naphtha and petroleum, and products of petroleum, n. e. s., five cents per gallon ..... 5c. p. gall.
174. Barrels, containing petroleum or its products, or any mixture of which petroleum forms a part, when such contents are chargeable with a specific duty, twenty cents each ..... 20c. each.

175. Lubricating oils, n. e. s., and axle grease, twenty-five per cent ad valorem..... 25 p. c.
176. Olive oil, n. e. s., twenty per cent ad valorem..... 20 p. c.
177. Essential oils, ten per cent ad valorem..... 10 p. c.
178. Vaseline, and all similar preparations of petroleum for toilet, medicinal or other purposes, thirty-five per cent ad valorem.. 35 p. c.

Coal.

179. Bituminous slack coal, such as will pass through a half-inch screen, subject to regulations to be made by the controller of customs, twenty per cent ad valorem, but not to exceed thirteen cents per ton of 2,000 pounds (being the equivalent of fifteen cents per ton of 2,240 pounds): Provided that if the United States Congress fixes the duty on such slack coal at a rate not exceeding fifteen cents per ton of 2,240 pounds, then the duty on such coal imported into Canada, as provided in this item, shall be the minimum duty on such coal from all countries, notwithstanding section seventeen of this act..... 20 p. c.
180. Coal, bituminous, round and run of mine, and coal, n. e. s., fifty-three cents per ton of 2,000 pounds (being the equivalent of sixty cents per ton of 2,240 pounds): Provided that if the United States Congress fixes the duty on such coal at a rate not exceeding forty cents per ton of 2,240 pounds, the governor in council may by proclamation reduce the duty mentioned in this item to forty cents per ton of 2,240 pounds, or the equivalent thereof per ton of 2,000 pounds, and the duty declared by such proclamation shall then be the minimum duty on such coal from all countries, notwithstanding section seventeen of this act..... 53c. p. ton of 2,000 lbs.

Earthenware, cements, slate and stoneware.

181. Building brick, paving brick, stove linings, and fire brick, n. e. s., and manufactures of clay or cement, n. o. p., twenty per cent ad valorem..... 20 p. c.
182. Earthenware and stoneware, viz: demijohns, churns or crocks, thirty per cent ad valorem ..... 30 p. c.
183. Drain tiles, not glazed, twenty per cent ad valorem..... 20 p. c.
184. Drain pipes, sewer pipes, chimney linings or vents, chimney tops and inverted blocks, glazed or unglazed, and earthenware tiles, thirty-five per cent ad valorem..... 35 p. c.
185. China and porcelain ware, also earthenware and stoneware, brown or colored and Rockingham ware, white granite or iron stoneware, "c. c." or cream-colored ware, decorated, printed or sponged, and all earthenware, n. e. s., thirty per cent ad valorem..... 30 p. c.
186. Baths, tubs and washstands of earthenware, stone, cement or clay, or of other material, n. o. p., thirty per cent ad valorem.. 30 p. c.
187. Cement, portland and hydraulic or water lime, in bags, barrels or casks, the weight of the package to be included in the weight for duty, twelve and one-half cents per one hundred pounds..... 12½c. p. 100 lbs.
188. Plaster of paris, or gypsum, ground, not calcined, fifteen per cent ad valorem..... 15 p. c.

189. Plaster of paris, or gypsum, calcined or manufactured, the weight of the package to be included in the weight for duty, twelve and one-half cents per one hundred pounds..... 12½c. p. 100 lbs.
190. Lithographic stones, not engraved, twenty per cent ad valorem... 20 p. c.
191. Grindstones, not mounted, and not less than thirty-six inches in diameter, fifteen per cent ad valorem ..... 15 p. c.
192. Grindstones, n. e. s., twenty-five per cent ad valorem..... 25 p. c.
193. Flagstone, sandstone and all building stone, not hammered or chiseled; and marble and granite, rough, not hammered or chiseled, fifteen per cent ad valorem..... 15 p. c.
194. Marble and granite, sawn only; flagstone and all other building stone, dressed; and paving blocks of stone, twenty per cent ad valorem..... 20 p. c.
195. Marble and granite, n. e. s., and all manufactures of marble or granite, n. o. p., thirty-five per cent ad valorem..... 35 p. c.
196. Manufactures of stone, n. o. p., thirty per cent ad valorem..... 30 p. c.
197. Roofing slate, twenty-five per cent ad valorem; provided that the duty shall not exceed seventy-five cents per square..... 25 p. c.
198. Slate mantels and other manufactures of slate, n. e. s., thirty per cent ad valorem..... 30 p. c.
199. Slate pencils and school writing slates, twenty-five per cent ad valorem..... 25 p. c.
200. Mosaic flooring of any material, thirty per cent ad valorem..... 30 p. c.

Glass and glassware.

201. Common and colorless window glass, and plain colored, opaque, stained or tinted, or muffled glass, in sheets, twenty per cent ad valorem..... 20 p. c.
202. Ornamental, figured, and enameled colored glass, vitrified or painted, chipped, figured, enameled, and obscured white glass; stained glass windows, and memorial or ornamental window glass, n. o. p., and rough rolled plate glass, thirty per cent ad valorem..... 30 p. c.
203. Plate glass, not beveled, in sheets or panes, not exceeding twenty-five square feet each, n. o. p., twenty-five per cent ad valorem..... 25 p. c.
204. Plate glass, not beveled, in sheets or panes, n. e. s., thirty-five per cent ad valorem..... 35 p. c.
205. Plate glass, beveled, in sheets or panes, n. o. p., thirty-five per cent ad valorem..... 35 p. c.
206. Silvered glass, beveled or not and framed or not, thirty-five per cent ad valorem..... 35 p. c.
207. German looking-glass plate, (thin plate), unsilvered or for silvering, twenty per cent ad valorem..... 20 p. c.
208. Glass demijohns or carboys, empty or filled, bottles, decanters, flasks, phials, glass jars and glass balls, lamp chimneys, glass shades or globes, cut, pressed or molded crystal or glass tableware, decorated or not, and blown glass tableware, thirty per cent ad valorem..... 30 p. c.
209. Bent plate or other sheet glass, and all other glass, and manufactures of glass, n. o. p., twenty per cent ad valorem..... 20 p. c.
210. Spectacles and eyeglasses, thirty per cent ad valorem..... 30 p. c.
211. Spectacle and eyeglass frames, and metal parts thereof, twenty *per cent* ad valorem..... 20 p. c.

Leather, rubber and manufactures of.

212. Dongola, cordovan, calf, sheep, lamb, kid or goat, kangaroo, alligator, or other upper leather, and all leather, dressed, waxed, glazed or further finished than tanned, n. e. s.; harness leather, and chamois skin, seventeen and one-half per cent ad valorem. ..... 17½ p. c.

213. Skins for morocco leather, tanned but not further manufactured; sole leather, and belting leather, of all kinds; tanners' scrap leather; and leather and skins, n. o. p., fifteen per cent ad valorem..... 15 p. c.

214. Glove leathers, tanned or dressed, colored or uncolored, when imported by glove manufacturers for use in their own factories in the manufacture of gloves, ten per cent ad valorem.... 10 p. c.

215. Japanned, patent or enameled leather, and morocco leather, twenty-five per cent ad valorem..... 25 p. c.

216. Leather board, leatheroid, and manufactures thereof, n. o. p., twenty-five per cent ad valorem..... 25 p. c.

217. Whips of all kinds, including thongs and lashes, thirty-five per cent ad valorem..... 35 p. c.

218. Belting, of leather or other material, n. e. s., twenty per cent ad valorem..... 20 p. c.

219. Boots and shoes, and slippers, of any material, n. e. s., twenty-five per cent ad valorem..... 25 p. c.

220. Manufactures of raw hide, and all manufactures of leather, n. o. p., twenty-five per cent ad valorem..... 25 p. c.

221. India-rubber boots and shoes; and all manufactures of india rubber and gutta-percha, n. o. p., twenty-five per cent ad valorem..... 25 p. c.

222. India-rubber clothing and clothing made waterproof with india rubber, rubber or gutta-percha hose, and cotton or linen hose lined with rubber, rubber mats or matting, and rubber packing, thirty-five per cent ad valorem..... 35 p. c.

Metals and manufactures of.

223. Iron or steel scrap, wrought, being waste or refuse, including punchings, cuttings or clippings of iron or steel plates or sheets having been in actual use; crop ends of tin plate bars, or of blooms, or of rails, the same not having been in actual use, one dollar per ton..... $1 p. ton.

Nothing shall be deemed scrap iron or scrap steel except waste or refuse iron or steel fit only to be remanufactured in rolling mills.

224. Iron in pigs, iron kentledge, and cast scrap iron, two dollars and fifty cents per ton..... $2.50 p. ton.

225. Ferrosilicon, ferromanganese, and spiegeleisen, five per cent ad valorem..... 5 p. c.

226. Iron or steel ingots, cogged ingots, blooms, slabs, billets, puddled bars and loops or other forms, n. o. p., less finished than iron or steel bars but more advanced than pig iron, except castings, two dollars per ton..... $2 p. ton.

227. Rolled iron or steel angles, tees, beams, channels, girders and other rolled shapes or sections, weighing less than thirty-five

pounds per lineal yard, not punched, drilled or further manufactured than rolled, n. o. p., seven dollars per ton..... $7 p. ton.

228. Rolled iron or steel angles, tees, beams, channels, joists, girders, zees, stars or other rolled shapes, or trough, bridge, building or structural rolled sections or shapes, not punched, drilled or further manufactured than rolled, n. e. s., and flat eye-bar blanks not punched or drilled, ten per cent ad valorem..... 10 p. c.

229. Bar iron or steel, rolled, whether in coils, rods, bars or bundles, comprising rounds, ovals and squares, and flats; and rolled shapes, n. o. p.; and rolled iron or steel hoop, band, scroll or strip, eight inches or less in width, number eighteen gauge and thicker, n. e. s., seven dollars per ton..... $7 p. ton.

230. Universal mill or rolled edge bridge plates of steel when imported by manufacturers of bridges, ten per cent ad valorem.. 10 p. c.

231. Rolled iron or steel plates not less than thirty inches in width, and not less than one quarter of an inch in thickness, n. o. p., ten per cent ad valorem..... 10 p. c.

232. Rolled iron or steel sheets or plates, sheared or unsheared, and skelp iron or steel, sheared or rolled in grooves, n. e. s., seven dollars per ton..... $7 p. ton.

233. Skelp iron or steel, sheared or rolled in grooves, when imported by manufacturers of wrought iron or steel pipe for use only in the manufacture of wrought iron or steel pipe in their own factories, five per cent ad valorem..... 5 p. c.

234. Rolled iron or steel sheets number seventeen gauge, and thinner, n. o. p.; Canada plates; Russia iron; flat galvanized iron or steel sheets, terne plate, and rolled sheets of iron or steel coated with zinc, spelter or other metal, of all widths or thickness, n. o. p., and rolled iron or steel hoop, band, scroll or strip, thinner than number eighteen gauge, n. e. s., five per cent ad valorem..... 5 p. c.

235. Chrome steel, fifteen per cent ad valorem..... 15 p. c.

236. Steel, in bars, bands, hoops, scroll or strips, sheets or plates, of any size, thickness or width, when of greater value than two and one-half cents per pound, n. o. p., five per cent ad valorem ..... 5 p. c.

237. Swedish rolled iron and Swedish rolled steel nail rods under half an inch in diameter for the manufacture of horseshoe nails, fifteen per cent ad valorem..... 15 p. c.

238. Iron and steel railway bars or rails of any form, punched or not, n. e. s., for railways, which term for the purposes of this item shall include all kinds of railways, street railways and tramways, even although they are used for private purposes only, and even although they are not used or intended to be used in connection with the business of common carrying of goods or passengers, thirty per cent ad valorem..... 30 p. c.

239. Railway fish plates and tie plates, eight dollars per ton..... $8 p. ton.

240. Switches, frogs, crossings and intersections for railways, thirty per cent ad valorem..... 30 p. c.

241. Locomotives for railways, n. e. s., thirty-five per cent ad valorem ..... 35 p. c.

242. Iron or steel bridges, or parts thereof; iron or steel structural work, columns, shapes or sections, drilled, punched or in any further stage of manufacture than as rolled or cast, n. e. s., thirty-five per cent ad valorem..... 35 p. c.
243. Forgings of iron or steel of whatever shape or size or in whatever stage of manufacture, n. e. s.; and steel shafting, turned, compressed, or polished; and hammered iron or steel bars or shapes, n. o. p., thirty per cent ad valorem..... 30 p. c.
244. Iron or steel castings, in the rough, n. e. s., twenty-five per cent ad valorem..... 25 p. c.
245. Stove plates, stoves of all kinds, for oil, gas, coal or wood, or parts thereof, and sad or smoothing, hatters' and tailors' irons, plated wholly or in part, or not, twenty-five per cent ad valorem..... 25 p. c.
246. Springs, axles, axle bars, n. e. s., and axle blanks, and parts thereof, of iron or steel, for railway or tramway, or other vehicles, thirty-five per cent ad valorem..... 35 p. c.
247. Cart or wagon skeins or boxes, thirty per cent ad valorem..... 30 p. c.
248. Cast iron pipe of every description, eight dollars per ton..... $8 per ton.
249. Wrought iron or steel boiler tubes, n. e. s., including flues and corrugated tubes for marine boilers, five per cent ad valorem.. 5 p. c.
250. Tubes of rolled steel, seamless not joined or welded, not more than one and one-half inch in diameter; and seamless steel tubes for bicycles, ten per cent ad valorem..... 10 p. c.
251. Wrought iron or steel tubing, plain or galvanized, threaded and coupled or not, over two inches in diameter, n. e. s., fifteen per cent ad valorem..... 15 p. c.
252. Wrought iron or steel tubing, plain or galvanized, threaded and coupled or not, two inches or less in diameter, n. e. s., thirty-five per cent ad valorem..... 35 p. c.
253. Other iron or steel pipe or tubing, plain or galvanized, riveted, corrugated or otherwise specially manufactured, n. o. p., thirty per cent ad valorem..... 30 p. c.
254. Iron or steel fittings for iron or steel pipe, of every description, and chilled iron or steel rolls, thirty per cent ad valorem..... 30 p. c.
255. Iron or steel cut nails and spikes, (ordinary builders'); and railroad spikes, one-half of one cent per pound..... ½c. p. lb.
256. Wrought and pressed nails and spikes, trunk, clout, coopers', cigar box, Hungarian, horseshoe, and other nails, n. e. s.; horse, mule and ox shoes, thirty per cent ad valorem..... 30 p. c.
257. Wire nails of all kinds, n. o. p., three-fifths of one cent per pound..... ⅗c. p. lb.
258. Composition nails and spikes and sheathing nails, fifteen per cent ad valorem..... 15 p. c.
259. Iron or steel shoe tacks, and ordinary cut tacks, leathered or not, brads, sprigs and shoe nails, double pointed tacks, and other tacks of iron and steel, n. o. p., thirty-five per cent ad valorem..... 35 p. c.
260. Screws, commonly called "wood screws," of iron or steel, brass or other metal, including lag or coach screws, plated or not, and machine or other screws, n. o. p., thirty-five per cent ad valorem..... 35 p. c.

261. Coil chain, coil chain links, and chain shackles, of iron or steel, five-sixteenths of an inch in diameter and over, five per cent ad valorem..... 5 p. c.
262. Barbed wire; and galvanized wire for fencing, numbers nine, twelve and thirteen gauge, fifteen per cent ad valorem, until 1st January, 1898; thereafter free..... 15 p. c.
263. Buckthorn strip fencing, woven wire fencing, and wire fencing of iron or steel, n. e. s., fifteen per cent ad valorem..... 15 p. c.
264. Wire, single or several, covered with cotton, linen, silk, rubber or other material, including cable so covered, n. e. s., thirty per cent ad valorem..... 30 p. c.
265. Brass wire, plain, ten per cent ad valorem..... 10 p. c.
266. Copper wire, plain, tinned or plated, fifteen per cent ad valorem.. 15 p. c.
267. Wire cloth, or woven wire of brass or copper, twenty-five per cent ad valorem..... 25 p. c.
268. Wire of all metals and kinds, n. o. p., twenty per cent ad valorem ..... 20 p. c.
269. Wire rope, stranded or twisted wire, clothes line, picture or other twisted wire and wire cable, n. e. s., twenty-five per cent ad valorem..... 25 p. c.
270. Wire cloth or wove wire, and wire netting, of iron or steel, thirty per cent ad valorem..... 30 p. c.
271. Needles, of any material or kind, and pins manufactured from wire of any metal, n. o. p., thirty per cent ad valorem..... 30 p. c.
272. Lead, old, scrap, pig and block, fifteen per cent ad valorem..... 15 p. c.
273. Lead, in bars, and in sheets, twenty-five per cent ad valorem... 25 p. c.
274. Lead pipe, lead shot and lead bullets, thirty-five per cent ad valorem ..... 35 p. c.
275. Lead, manufactures of, n. o. p., thirty per cent ad valorem..... 30 p. c.
276. Brass and copper nails, tacks, rivets and burrs or washers; bells and gongs, n. e. s., and all manufactures of brass or copper, n. o. p., thirty per cent ad valorem..... 30 p. c.
277. Zinc, manufactures of, n. o. p., twenty-five per cent ad valorem.. 25 p. c.
278. Nickel anodes, ten per cent ad valorem..... 10 p. c.
279. Iron or steel nuts, washers, rivets, and bolts, with or without threads, and nut, bolt and hinge blanks, and T and strap hinges of all kinds, n. e. s., three-quarters of one cent per pound and twenty-five per cent ad valorem..... ¾c. p. lb. and 25 p. c.
280. Builders', cabinetmakers', upholsterers', harness makers', saddlers', and carriage hardware, including butt hinges, locks, currycombs or curry cards, horse boots, harness and saddlery, n. e. s., thirty per cent ad valorem..... 30 p. c.
281. Skates of all kinds, roller or other, and parts thereof, thirty-five per cent ad valorem..... 35 p. c.
282. Gas meters, thirty-five per cent ad valorem..... 35 p c.
283. Safes, doors for safes and vaults; scales, balances, weighing beams, and strength testing machines of all kinds, thirty per cent ad valorem..... 30 p. c.
284. Carvers, knives and forks of steel, butcher and table steels, oyster, bread, kitchen, cooks', butcher, shoe, farrier, putty, hacking and glaziers' knives, cigar knives, spatulas or palette knives, razors, erasers or office knives, pen, pocket, pruning,

sportsmen's or hunters' knives, manicure files, scissors, trimmers; barbers', tailors' and lamp shears, horse and toilet clippers, and all like cutlery, plated or not, n. o. p.,—when any of the above articles are imported in cases or cabinets, the cases or cabinets shall be dutiable at the same rate as their contents,—thirty per cent ad valorem..... 30 p. c.

285. Knife blades or blanks, and table forks of iron or steel in the rough, not handled, filed, ground or otherwise manufactured, ten per cent ad valorem..... 10 p. c.

286. Celluloid, molded into sizes for handles of knives and forks, not bored nor otherwise manufactured; also, molded celluloid balls and cylinders, coated with tin foil or not, but not finished or further manufactured, and celluloid lamp shade blanks, ten per cent ad valorem..... 10 p. c.

287. Bird, parrot, squirrel and rat cages, of wire, and metal parts thereof, thirty-five per cent ad valorem..... 35 p. c.

288. Files and rasps, n. e. s., thirty per cent ad valorem..... 30 p. c.

289. Adzes, cleavers, hatchets, saws, wedges, sledges, hammers, crowbars, cant dogs and track tools; picks, mattocks, and eyes or poles for the same; anvils, vises; and tools, of all kinds, for hand or for machine use, including shoemakers' and tinsmiths' tools or bench machines, n. o. p., thirty per cent ad valorem.. 30 p. c.

290. Axes, scythes, sickles or reaping hooks, hay or straw knives, edging knives, hoes, rakes, pronged forks, snaths, farm, road or field rollers, post hole diggers, and other agricultural implements, n. e. s., twenty-five per cent ad valorem..... 25 p. c.

291. Shovels and spades, iron or steel, n. e. s.; shovel and spade blanks, and iron or steel cut to shape for the same; and lawn mowers, thirty-five per cent ad valorem..... 35 p. c.

292. Britannia metal, nickel silver, Nevada and German silver, manufactures of, not plated, and manufactures of aluminium, n. o. p., twenty-five per cent ad valorem..... 25 p. c.

293. Sterling and other silverware, nickel-plated ware, gilt or electro-plated ware, wholly or in part, of all kinds, n. e. s., thirty per cent ad valorem..... 30 p. c.

294. Telephone and telegraph instruments, electric and galvanic batteries, electric motors, dynamos, generators, sockets, insulators of all kinds; and electric apparatus, n. e. s., twenty-five per cent ad valorem ..... 25 p. c.

295. Electric light carbons and carbon points, of all kinds, n. e. s., thirty-five per cent ad valorem..... 35 p. c.

296. Carbons over six inches in circumference, fifteen per cent ad valorem ..... 15 p. c.

297. Lamps, side lights and headlights, lanterns, chandeliers, gas, coal or other oil fixtures and electric light fixtures, or metal parts thereof, including lava or other tips, burners, collars, galleries, shades and shade holders, thirty per cent ad valorem. 30 p. c.

298. Lamp springs, and glass bulbs for electric lights, ten per cent ad valorem ..... 10 p. c.

299. Babbitt metal, type metal, phosphor tin and phosphor bronze in blocks, bars, plates, sheets and wire, ten per cent ad valorem.. 10 p. c.

300. Type for printing, including chases, quoins and slugs, of all kinds, twenty per cent ad valorem..... 20 p. c.

301. Plates engraved on wood, steel, or other metal, and transfers taken from the same, including engravers' plates of steel, polished, engraved or for engraving thereupon, twenty per cent ad valorem..... 20 p. c.

302. Stereotypes, electrotypes, and celluloids for almanacs, calendars, illustrated pamphlets, newspaper advertisements or engravings, and all other like work for commercial, trade or other purposes, n. e. s., and matrices or copper shells for the same, one and one-half cent per square inch..... 1½c. p. sq. in.

303. Stereotypes, electrotypes and celluloids of newspaper columns, and bases for the same, composed wholly or partially of metal or celluloid, one-fourth of one cent per square inch..... ¼c. p. sq. in.
And matrices or copper shells for the same, one and one-half cent per square inch..... 1½c. p. sq. in.

304. Clothes wringers for domestic use, and parts thereof, thirty-five per cent ad valorem..... 35 p. c.

305. Buckles of iron, steel, brass or copper, of all kinds, n. o. p., (not being jewelry), thirty per cent ad valorem..... 30 p. c.

306. Guns, rifles, including air guns and air rifles not being toys, muskets, cannons, pistols, revolvers, or other firearms; cartridge cases, cartridges, primers, percussion caps, wads, or other ammunition, n. o. p.; bayonets, swords, fencing foils and masks; gun or pistol covers or cases, game bags, loading tools and cartridge belts of any material, thirty per cent ad valorem.. 30 p. c.

307. Agate, granite or enameled iron or steel hollow ware, thirty-five per cent ad valorem ..... 35 p. c.

308. Enameled iron or steel ware, n. e. s.; iron or steel hollow ware, plain black, tinned or coated; and nickel and aluminium kitchen or household hollow ware, n. e. s., thirty per cent ad valorem..... 30 p. c.

309. Tinware, plain, japanned or lithographed, and all manufactures of tin, n. e. s., and manufactures of galvanized sheet iron or of galvanized sheet steel, n. o. p., twenty-five per cent ad valorem. 25 p. c.

310. Signs, of any material, framed or not; and letters of any material for signs or similar use, thirty per cent ad valorem ..... 30 p. c.

311. Fire engines and fire extinguishing machines, including sprinklers for fire protection, thirty-five per cent ad valorem..... 35 p. c.

312. Brass pumps of all kinds, and garden or lawn sprinklers, thirty per cent ad valorem ..... 30 p. c.

313. Printing presses, printing machines, lithographic presses and type-making accessories therefor; folding machines, bookbinders' bookbinding, ruling, embossing and paper cutting machines, and parts thereof, ten per cent ad valorem..... 10 p. c.

314. Sewing machines, and parts thereof, thirty per cent ad valorem.. 30 p. c.

315. Steam engines, boilers, ore crushers and rock crushers, stamp mills, Cornish and belted rolls, rock drills, air compressors, cranes, derricks, percussion coal cutters, pumps, n. e. s., windmills, horsepowers, portable engines, thrashers, separators, fodder or feed cutters, potato diggers, grain crushers, fanning mills, hay tedders, farm wagons, slot machines and typewriters, and all machinery composed wholly or in part of iron or steel, n. o. p., twenty-five per cent ad valorem..... 25 p. c.

316. Machine card clothing, twenty-five per cent ad valorem..... 25 p. c.

317. Mold boards or shares, or plow plates, land sides, and other plates for agricultural implements, when cut to shape from rolled plates of steel but not molded, punched, polished or otherwise manufactured, five per cent ad valorem..... 5 p. c.
318. Mowing machines, harvesters self-binding or without binders, binding attachments, reapers, cultivators, plows, harrows, horse rakes, seed drills, manure spreaders, weeders, and malleable sprocket or link belting chain for binders, twenty per cent ad valorem..... 20 p. c.
319. Trawls, trawling spoons, fly hooks, sinkers, swivels, and sportsmen's fishing bait, and fishhooks, n. e. s., thirty per cent ad valorem..... 30 p. c.
320. Patterns of brass, iron, steel or other metal (not being models), thirty per cent ad valorem..... 30 p. c.
321. Manufactures, articles or wares not specially enumerated or provided for, composed wholly or in part of iron or steel, and whether wholly or partly manufactured, thirty per cent ad valorem..... 30 p. c.

Vehicles.

322. Freight wagons, drays, sleighs and similar vehicles, twenty-five per cent ad valorem..... 25 p. c.
323. Buggies, carriages, pleasure carts and similar vehicles, n. e. s., including cutters, children's carriages and sleds, and finished parts thereof, n. o. p., thirty-five per cent ad valorem..... 35 p. c.
324. Railway cars, (or other cars), wheelbarrows, trucks, road or railway scrapers and hand carts, thirty per cent ad valorem..... 30 p. c.
325. Bicycles and tricycles, thirty per cent ad valorem..... 30 p. c.

Manufactures of wood, cane, cork.

326. Cane, reed or rattan, split or otherwise manufactured, n. o. p., fifteen per cent ad valorem..... 15 p. c.
327. Corks, and other manufactures of cork wood or cork bark, n. o. p., twenty per cent ad valorem..... 20 p. c.
328. Sawed boards, planks and deals planed or dressed on one or both sides, when the edges thereof are jointed or tongued and grooved, twenty-five per cent ad valorem..... 25 p. c.
329. Lumber and timber, manufactured, n. e. s., twenty per cent ad valorem..... 20 p. c.
330. Pails and tubs of wood; churns, brooms and whisks, washboards, pounders and rolling pins, twenty per cent ad valorem..... 20 p. c.
331. Veneers of wood, not over three thirty-seconds of an inch in thickness, seven and one-half per cent ad valorem..... 7½ p. c.
332. Moldings of wood, plain, gilded or otherwise further manufactured, twenty-five per cent ad valorem..... 25 p. c.
333. Wood pulp, twenty-five per cent ad valorem..... 25 p. c.
334. Manufactures of wood, n. o. p., twenty-five per cent ad valorem.. 25 p. c.
335. Fishing rods, walking sticks and walking canes, of all kinds, n. e. s., thirty per cent ad valorem..... 30 p. c.
336. Picture frames and photograph frames, of any material, thirty per cent ad valorem..... 30 p. c.

337. Umbrella, parasol and sunshade sticks or handles, n. e. s., twenty per cent ad valorem..... 20 p. c.
338. Coffins and caskets, and metal parts thereof, twenty-five per cent ad valorem..... 25 p. c.
339. Show cases, of all kinds, and metal parts thereof, thirty-five per cent ad valorem..... 35 p. c.
340. Billiard tables, with or without pockets, and bagatelle tables or boards, cues, balls, cue racks, and cue tips, thirty-five per cent ad valorem..... 35 p. c.
341. Vulcanized fiber, kartavert, indurated fiber, and like material, and manufactures of, n. e. s., twenty-five per cent ad valorem.. 25 p. c
342. Blinds of wood, metal or other material, not textile or paper, thirty per cent ad valorem..... 30 p. c
343. House, office, cabinet or store furniture of wood, iron, or other material, in parts or finished; wire screens, wire doors and wire windows; cash registers; window cornices and cornice poles of all kinds; hair, spring and other mattresses, bolsters and pillows, including furniture springs and carpet sweepers; thirty per cent ad valorem..... 30 p. c.
344. Window shade or blind rollers, thirty-five per cent ad valorem.. 35 p. c.

Jewelry and material therefor, etc.

345. Watch cases, thirty per cent ad valorem..... 30 p. c.
346. Clocks, watches, watch glasses, clock and watch keys, and clock movements, twenty-five per cent ad valorem..... 25 p. c.
347. Watch actions and movements, ten per cent ad valorem..... 10 p. c.
348. Precious stones, n. e. s., polished, but not set, pierced or otherwise manufactured, and imitations thereof, ten per cent ad valorem..... 10 p. c.
349. Composition metal for the manufacture of jewelry and filled gold watch cases, ten per cent ad valorem..... 10 p. c.
350. Jewelry, for the adornment of the person, including hat pins, hairpins, belt or other buckles, and similar personal orna mental articles commercially known as jewelry, n. o. p., and all manufactures of gold and silver, n. e. s., thirty per cent ad valorem..... 30 p. c.
351. Fancy writing desks, fancy cases for jewelry, watches, silverware, plated ware and cutlery; glove, handkerchief and collar boxes or cases, brush or toilet cases, and all fancy cases for similar fancy articles, of any material; fans, dolls and toys of all kinds; ornaments of alabaster, spar, amber, terra cotta or composition; statuettes and bead ornaments, n. e. s., thirty-five per cent ad valorem..... 35 p. c.
352. Gold, silver and aluminium leaf, Dutch or schlag metal leaf; brocade and bronze powders and gold liquid paint, twenty-five per cent ad valorem..... 25 p. c.

Minerals.

353. Asbestos in any form other than crude, and all manufactures thereof, twenty-five per cent ad valorem..... 25 p. c.
354. Plumbago, not ground or otherwise manufactured, ten per cent ad valorem..... 10 p. c.
355. Plumbago, ground, and manufactures of, n. e. s., and foundry facings of all kinds, twenty-five per cent ad valorem..... 25 p. c.

Musical instruments.

356. Pianofortes, organs and musical instruments of all kinds, thirty per cent ad valorem..... 30 p. c.
357. Brass band instruments, parts of pianofortes and parts of organs, twenty-five per cent ad valorem..... 25 p. c.
Provided that musical instrument cases shall be dutiable at the same rate as their contents when imported containing the instruments.

Textiles, hats, furs, etc.

358. Cotton batts, batting and sheet wadding, cotton warps and cotton yarns, dyed or not, n. e. s., twenty-five per cent ad valorem.. 25 p. c.
359. Cotton fabrics, white or gray, bleached or unbleached, n. o. p., twenty-five per cent ad valorem..... 25 p. c
360. Cotton fabrics, printed, dyed or colored, n. o. p., thirty-five per cent ad valorem..... 35 p. c.
361. Damask of linen, stair linen, diaper, napkins, doilies, table and tray cloths, sheets, quilts, towels, and like articles of linen or cotton, or of linen and cotton combined, made up or not, n. o. p., thirty per cent ad valorem..... 30 p. c.
362. Embroideries, n. e. s., laces, braids, fringes, cords, elastic, round or flat; garter elastic, tassels and bracelets, n. o. p., braids, chains, cords, or other manufactures of hair, n. e. s.; handkerchiefs of all kinds; lace collars and all similar lace goods; lace nets and nettings of cotton, linen, silk or other material; shams, curtains, when made up, trimmed or untrimmed; regalia, badges and belts of all kinds, n. o. p.; linen, silk and cotton clothing, and all other articles made up by the seamstress from linen or cotton fabrics, n. o. p., corsets of all kinds, corset clasps, busks, blanks and steels, and covered corset wires, cut to lengths, tipped or untipped, thirty-five per cent ad valorem..... 35 p. c.
363. White cotton embroideries, twenty-five per cent ad valorem..... 25 p. c.
364. Jeans, sateens and coutils, when imported by corset and dress stay makers for use in the manufacture of such articles in their own factories, twenty per cent ad valorem..... 20 p. c.
365. Collars and cuffs, of cotton, linen, xylonite, xyolite or celluloid, thirty-five per cent ad valorem..... 35 p. c.
366. Shirts of any material, and ladies' or misses' blouses and shirt waists, thirty-five per cent ad valorem..... 35 p. c.
367. Crapes, black, twenty per cent ad valorem..... 20 p. c.
368. Velvets, velveteens, silk velvets, plush and silk fabrics, thirty per cent ad valorem..... 30 p. c.
369. Ribbons of all kinds and materials, and manufactures of silk or of which silk is the component part of chief value, n. e. s., thirty-five per cent ad valorem..... 35 p. c.
370. Cotton sewing thread in hanks, three and six cord, fifteen per cent ad valorem..... 15 p. c.
371. Cotton sewing thread and crochet cotton, on spools or tubes or in balls, and all other cotton thread, n. e. s., twenty-five per cent ad valorem..... 25 p. c.
372. Silk in the gum, or spun, not more advanced than singles, tram

and thrown organzine, not colored, fifteen per cent ad valorem..... 15 p. c

373. Sewing and embroidery silk, and silk twist, twenty-five per cent ad valorem..... 25 p. c.

374. Jute cloth, uncolored, not otherwise finished than bleached or calendered, ten per cent ad valorem..... 10 p. c.

375. Horse clothing of jute, shaped or otherwise manufactured, thirty per cent ad valorem..... 30 p. c.

376. All manufactures of hemp, flax or jute, n. e. s., or of flax, hemp and jute combined, twenty-five per cent ad valorem..... 25 p. c.

377. Bags or sacks of hemp, linen or jute, and cotton seamless bags, twenty per cent ad valorem..... 20 p. c.

378. Felt, pressed, of all kinds, not filled or covered by or with any woven fabric, twenty per cent ad valorem..... 20 p. c.

379. Haircloth of all kinds, thirty per cent ad valorem..... 30 p. c.

380. Sails for boats and ships, twenty-five per cent ad valorem..... 25 p. c.

381. Cloths, not rubbered or made waterproof, whether of wool, cotton, unions, silk or ramie, sixty inches or over in width and weighing not more than seven ounces to the square yard, when imported exclusively for the manufacture of mackintosh clothing, under regulations to be adopted by the governor in council, fifteen per cent ad valorem..... 15 p. c.

382. Featherbone, plain or covered, in coils, twenty per cent ad valorem ..... 20 p. c.

383. Stockinettes for the manufacture of rubber boots and shoes, when imported by manufacturers of rubber boots and shoes, for use exclusively in the manufacture thereof in their own factories, fifteen per cent ad valorem..... 15 p. c.

384. Cotton duck, gray or white, n. e. s., twenty-two and one-half per cent ad valorem..... 22½ p. c.

385. Oiled silk and oiled cloth, and tape or other textile india rubbered, flocked or coated, n. o. p., thirty per cent ad valorem. 30 p. c.

386. Women's and children's dress goods, coat linings, italian cloths, alpacas, orleans, cashmeres, henriettas, serges, buntings, nun's cloth, bengalines, whip cords, twills, plains or jacquards of similar fabrics, composed wholly or in part of wool, worsted, the hair of the camel, alpaca, goat, or like animal, not exceeding in weight six ounces to the square yard, when imported in the gray or unfinished state for the purpose of being dyed or finished in Canada, under such regulations as are established by the governor in council, twenty-five per cent ad valorem..... 25 p. c.

387. Socks and stockings of all kinds, thirty-five per cent ad valorem.. 35 p. c.

388. Knitted goods, n. e. s., undershirts and drawers, and hosiery of all kinds, n. e. s., thirty-five per cent ad valorem..... 35 p. c.

389. Shawls of all kinds; railway or traveling rugs and lap dusters of all kinds, thirty per cent ad valorem..... 30 p. c.

390. Wool, viz.: Leicester, Cotswold, Lincolnshire, Southdown combing wools, or wools known as luster wools and other like combing wools, such as are grown in Canada, three cents per pound..... 3c. p. lb.

391. Worsted tops made from such wools as are mentioned in the next preceding item, fifteen per cent ad valorem..... 15 p. c.

392. Yarns, woolen and worsted, n. e. s., thirty per cent ad valorem.. 30 p. c.
393. Yarns, composed wholly or in part of wool, worsted, the hair of the alpaca, goat or like animal, costing thirty cents per pound and over, when imported on the cop or tube or in the hank by manufacturers of woolen goods for use in their products, twenty per cent ad valorem..... 20 p. c.
394. Fabrics, manufactures, wearing apparel and ready-made clothing, composed wholly or in part of wool, worsted, the hair of the alpaca, goat or other like animal, n. e. s.; blankets, bed comforters, or counterpanes, flannels, cloths, doeskins, cassimeres, tweeds, coatings, overcoatings and felt cloth, n. e. s., thirty-five per cent ad valorem..... 35 p. c.
395. Mats, door or carriage, n. e. s., thirty-five per cent ad valorem.. 35 p. c.
396. Carpeting, rugs, mats and matting of cocoa, straw, hemp or jute; carpet linings and stair pads, twenty-five per cent ad valorem..... 25 p. c.
397. Turkish or imitation Turkish or others rugs or carpets; and carpets, n. e. s., thirty-five per cent ad valorem..... 35 p. c.
398. Enameled carriage, floor, shelf, and table oilcloth, linoleum, and cork matting or carpets. thirty per cent ad valorem..... 30 p. c.
399. Window shades in the piece or cut and hemmed or mounted on rollers, n. e. s., thirty-five per cent ad valorem..... 35 p. c.
400. Webbing, elastic and nonelastic, twenty per cent ad valorem..... 20 p. c.
401. Umbrellas, parasols and sunshades of all kinds and materials, thirty-five per cent ad valorem..... 35 p. c.
402. Gloves and mitts, of all kinds, thirty-five per cent ad valorem.. 35 p. c.
403. Hats, caps and bonnets, n. e. s., and hat, cap and bonnet shapes, thirty per cent ad valorem..... 30 p. c.
404. Braces or suspenders, and metal parts thereof, thirty-five per cent ad valorem..... 35 p. c.
405. Boot, shoe and stay laces of any material, thirty per cent ad valorem..... 30 p. c.
406. Fur skins, wholly or partially dressed, fifteen per cent ad valorem..... 15 p. c.
407. Caps, hats, muffs, tippets, capes, coats, cloaks and other manufactures of fur, n. o. p., thirty per cent ad valorem..... 30 p. c.
408. Church vestments of any material, twenty per cent ad valorem. 20 p. c.

Sundries.

409. Ships and other vessels, built in any foreign country, whether steam or sailing vessels, on application for Canadian register, on the fair market value of the hull, rigging, machinery and all appurtenances; on the hull, rigging and all appurtenances, except machinery, ten per cent ad valorem; on the boilers, 10 p. c. steam engines and other machinery, twenty-five per cent ad valorem..... 25 p. c.
410. Canoes, skiffs, or open pleasure sailboats, of any material, twenty-five per cent ad valorem..... 25 p. c.
411. Canvas, and sail twine of hemp and flax, when to be used for boats' and ships' sails, five per cent ad valorem..... 5 p. c.
412. Blasting and mining powder, two cents per pound..... 2c. p. lb.
413. Cannon, musket, rifle, gun and sporting powder and canister powder, three cents per pound..... 3c. p. lb.

414. Nitroglycerin, giant powder, nitro and other explosives, three cents per pound ..... 3c. p. lb.
415. Glycerin, when imported by manufacturers of explosives, for use in the manufacture thereof in their own factories, ten per cent ad valorem ..... 10 p. c.
416. Torpedoes, firecrackers, and fireworks of all kinds, twenty-five per cent ad valorem ..... 25 p. c.
417. Fertilizers, compounded or manufactured, ten per cent ad valorem ..... 10 p. c.
418. Lamp wicks, twenty-five per cent ad valorem ..... 25 p. c.
419. Photographic dry plates, thirty per cent ad valorem ..... 30 p. c.
420. Emery wheels, and manufactures of emery, twenty-five per cent ad valorem ..... 25 p. c.
421. Lead pencils, pens, penholders and rulers of all kinds, twenty-five per cent ad valorem ..... 25 p. c.
422. Magic lanterns and slides therefor, philosophical, photographic, mathematical and optical instruments, n. e. s., cyclometers and pedometers, and tape lines of any material, twenty-five per cent ad valorem ..... 25 p. c.
423. Tobacco pipes of all kinds, pipe mounts, cigar and cigarette cases, cigar and cigarette holders, and cases for the same, smokers' sets and cases therefor, and tobacco pouches, thirty-five per cent ad valorem ..... 35 p. c.
424. Trunks, valises, hat boxes, carpet bags, tool bags or baskets, satchels, reticules, musical instrument cases, purses, portmanteaus, pocketbooks, fly books, and parts thereof, n. o. p., and baskets of all kinds, thirty per cent ad valorem ..... 30 p. c.
425. Frames, clasps and fasteners for purses and chatelaine bags or reticules not more than seven inches in width, when imported by manufacturers of purses and chatelaine bags or reticules, for use in the manufacture thereof, in their own factories, twenty per cent ad valorem ..... 20 p. c.
426. Buttons, viz:—Pantaloon buttons wholly of metal, and shoe buttons, n. e. s., twenty-five per cent ad valorem ..... 25 p. c.
Buttons of all kinds covered or not, n. o. p., including recognition buttons, and cuff or collar buttons (not being jewelry), thirty-five per cent ad valorem ..... 35 p. c.
427. Combs for dress and toilet, including mane combs, of all kinds, thirty-five per cent ad valorem ..... 35 p. c.
428. Brushes, of all kinds, twenty-five per cent ad valorem ..... 25 p. c.
429. Hair, curled or dyed, twenty per cent ad valorem ..... 20 p. c.
430. Artificial flowers, twenty-five per cent ad valorem ..... 25 p. c.
431. Twine and cordage of all kinds, n. e. s., twenty-five per cent ad valorem ..... 25 p. c.
432. Rove, when imported for the manufacture of twine for harvest binders, five per cent ad valorem ..... 5 p. c.
433. Binders' twine or twine for harvest binders of hemp, jute, manila or sisal, and of manila and sisal mixed, ten per cent ad valorem until 1st January, 1898; thereafter to be free ..... 10 p. c.
434. Hammocks, lawn tennis nets, sportsmen's fish nets, and other articles manufactured of twine, n. o. p., thirty per cent ad valorem ..... 30 p. c.

Sugar, sirups and molasses.

435. All sugar above number sixteen Dutch standard in color, and all refined sugars of whatever kinds, grades or standards, one cent per pound ..... 1c. p. lb.

436. Sugar, n. e. s., not above number sixteen Dutch standard in color, sugar drainings, or pumpings drained in transit, melado or concentrated melado, tank bottoms and sugar concrete, one-half cent per pound; the usual packages in which imported to be free ..... ½c. p. lb.

437. Glucose or grape sugar, glucose sirup and corn sirup, or any sirups containing any admixture thereof, three-fourths of one cent per pound ..... ¾c. p. lb.

438. Sugar candy, brown or white, and confectionery, including sweetened gums, candied peel and pop corn, one-half of one cent per pound and thirty-five per cent ad valorem ..... ½c. p. lb. and 35 p. c.

439. Maple sugar, and maple sirup, twenty per cent ad valorem .... 20 p. c.

440. Sirup and molasses of all kinds, n. o. p., the product of the sugar cane or beet, n. e. s., and all imitations thereof or substitutes therefor, three-fourths of one cent per pound ..... ¾c. p. lb.

441. Molasses produced in the process of the manufacture of cane sugar from the juice of the cane without any admixture with any other ingredient, when imported in the original package in which it was placed at the point of production and not afterwards subjected to any process of treating or mixing, the package in which imported, when of wood, to be free,—

(*a.*) Testing by polariscope forty degrees or over, one and three-fourths cent per gallon ..... 1¾c. p. gall.

(*b.*) When testing by polariscope less than forty degrees and not less than thirty-five degrees, one and three-fourths cent per gallon, and in addition thereto one cent per gallon for each degree or fraction of a degree less than forty degrees ..... 1¾c. p. gall. 1c. additional p. degree.

Tobacco, and manufactures of.

442. Cigars and cigarettes, the weight of the cigarettes to include the weight of the paper covering, three dollars per pound and twenty-five per cent ad valorem ..... $3 p. lb. and 25 p. c.

443. Cut tobacco, fifty-five cents per pound ..... 55c. p. lb.

444. Manufactured tobacco, n. e. s., and snuff, fifty cents per pound.. 50c. p. lb.

445. Foreign leaf raw tobacco, unstemmed, unmanufactured, for excise purposes, under conditions of the inland revenue act, after 30th June, 1897, ten cents per pound, to be computed on the weight when ex-warehoused ..... 10c. p. lb.

446. Foreign raw leaf tobacco, stemmed, unmanufactured, for excise purposes, under conditions of the inland revenue act, after 30th June, 1897, fourteen cents per pound, to be computed on the weight when ex-warehoused ..... 14c. p. lb.

Unenumerated goods.

447. All goods not enumerated in this act as subject to any other rate of duty, nor declared free of duty by this act, and not being goods the importation whereof is by this act or any other act prohibited, shall be subject to a duty of twenty per cent ad valorem ..... 20 p. c.

SCHEDULE B.

FREE GOODS.

448. Articles for the use of the governor-general.

449. Articles when imported by and for the use of the army and navy, viz.: Arms, military or naval clothing, musical instruments for bands, military stores and munitions of war; also articles consigned direct to officers and men on board vessels of Her Majesty's navy, for their own personal use or consumption.

450. Articles imported by or for the use of the Dominion Government, or of any of the departments thereof, or by and for the Senate or House of Commons, including the following articles when imported by the said Government or through any of the departments thereof for the use of the Canadian militia: Military clothing, musical instruments for military bands, military stores and munitions of war.

451. Articles for the personal or official use of consuls-general who are natives or citizens of the country they represent and who are not engaged in any other business or profession.

452. Travelers' baggage, under regulations prescribed by the controller of customs.

453. Carriages for travelers and carriages laden with merchandise, and not to include circus troupes or hawkers, under regulations prescribed by the controller of customs.

454. Apparel, wearing and other personal and household effects, not merchandise, of British subjects dying abroad, but domiciled in Canada; books, pictures, family plate or furniture, personal effects and heirlooms left by bequest.

455. Settlers' effects, viz.: Wearing apparel, household furniture, books, implements and tools of trade, occupation or employment, guns, musical instruments, domestic sewing machines, typewriters, live stock, bicycles, carts and other vehicles and agricultural implements in use by the settler for at least six months before his removal to Canada, not to include machinery, or articles imported for use in any manufacturing establishment, or for sale; provided that any dutiable article entered as settlers' effects may not be so entered unless brought with the settler on his first arrival, and shall not be sold or otherwise disposed of without payment of duty, until after twelve months' actual use in Canada; provided also, that under regulations made by the controller of customs, live stock, when imported into Manitoba or the Northwest Territories by intending settlers, shall be free until otherwise ordered by the governor in council.

456. Animals and articles brought into Canada temporarily and for a period not exceeding three months, for the purpose of exhibition or of competition for prizes offered by any agricultural or other association; (but a bond shall be first given in accordance with regulations prescribed by the controller of customs, with the condition that the full duty to which such animals or articles would otherwise be liable shall be paid in case of their sale in Canada, or if not reexported within the time specified in such bond).

457. Horses, cattle, sheep, swine and dogs, for the improvement of stock, under regulations made by the treasury board and approved by the governor in council.

458. Menageries, horses, cattle, carriages and harness of, under regulations prescribed by the controller of customs.

459. Admiralty charts.

460. Typewriters, tablets with movable fixtures, and musical instruments, when imported by and for the use of schools for the blind, and being and remaining the sole property of the governing bodies of the said schools and not of

private individuals; the above particulars to be verified by special affidavit on each entry when presented.

461. Globes, geographical, topographical and astronomical; maps and charts for the use of schools for the blind; pictorial illustrations of insects or similar studies, when imported for the use of colleges, schools and scientific and literary societies; manuscripts and insurance maps, and album insides of paper.

462. Philosophical instruments and apparatus—that is to say, such as are not manufactured in Canada, when imported for use in universities, colleges, schools, scientific societies, and public hospitals.

463. Botanical and entomological specimens; mineralogical specimens; skins of birds, and skins of animals not natives of Canada, for taxidermic purposes, not further manufactured than prepared for preservation; fishskins; and anatomical preparations and skeletons or parts thereof; and specimens, models and wall diagrams for illustration of natural history for universities and public museums.

464. Books, viz.: Books on the application of science to industries of all kinds, including books on agriculture, horticulture, forestry, fish and fishing, mining, metallurgy, architecture, electric and other engineering, carpentry, shipbuilding, mechanism, dyeing, bleaching, tanning, weaving and other mechanic arts, and similar industrial books; also books printed in any language other than the English and French languages, or in any two languages not being English and French, or in any three or more languages; and Bibles, prayer books, psalm and hymn books, religious tracts, and Sunday school lesson pictures.

465. Books, embossed, for the blind, and books for the instruction of the deaf and dumb and blind.

466. Books printed by any government or by any association for the promotion of science or letters, and official annual reports of religious or benevolent associations, and issued in the course of the proceedings of the said associations, to their members, and not for the purpose of sale or trade.

467. Books, not printed or reprinted in Canada, which are included and used as text-books in the curriculum of any university, incorporated college or normal school in Canada; books specially imported for the bona fide use of incorporated mechanics' institutes, public libraries, libraries of universities, colleges and schools, or for the library of any incorporated medical, law, literary, scientific or art association or society, and being the property of the organized authorities of such library, and not in any case the property of individuals,—the whole under regulations to be made by the controller of customs,—provided that importers of books who have sold the same for the purpose mentioned in this item, shall, upon proof of sale and delivery for such purpose, be entitled to a refund of any duty paid thereon.

468. Books, bound or unbound, which have been printed and manufactured more than twelve years.

469. Newspapers, and quarterly, monthly and semimonthly magazines, and weekly literary papers, unbound; and tailors', milliners', and mantle-makers' fashion plates.

470. Paintings in oil or water colors, by artists of well-known merit, or copies of the old masters by such artists; and paintings, in oil or water colors, the production of Canadian artists, under regulations to be made by the controller of customs.

471. Clothing and books, donations of, for charitable purposes, and photographs, not exceeding three, sent by friends and not for the purpose of sale.

472. Lifeboats and life-saving apparatus specially imported by societies established to encourage the saving of human life.
473. Coins, cabinets of, collections of medals and of other antiquities including collections of postage stamps; gold and silver coins, except United States silver coin; medals of gold, silver or copper, and other metallic articles actually bestowed as trophies or prizes and received and accepted as honorary distinctions, and cups or other prizes won in bona fide competitions; and medals commemorating the Diamond Jubilee of Her Majesty Queen Victoria, until the thirty-first of December, 1897, and dies for manufacturing such medals.
474. Locomotive and railway passenger, baggage and freight cars, being the property of railway companies in the United States, running upon any line of road crossing the frontier, so long as Canadian locomotives and cars are admitted free under similar circumstances into the United States, under regulations prescribed by the controller of customs.
475. Models of inventions and of other improvements in the arts,—but no article shall be deemed a model which can be fitted for use.
476. Aluminium in ingots, block or bars, strips, sheets or plates; alumina and chloride of aluminium, or chloralum, sulphate of alumina and alum cake; and alum in bulk only, ground or unground.
477. Ambergris; ammonia, sulphate of, sal ammoniac, and nitrate of ammonia; arsenic; bromine, burgundy pitch; cinnabar, cochineal, cyanide of potassium, and cyanogen or compound of bromine and potassium for reducing metals in mining operations; iodine, crude; kryolite or cryolite, mineral; oxalic acid; quinine, salts of; saltpeter; calcareous tufa; alizarin and artificial alizarin; aniline oil, crude; aniline salts and arseniate of aniline; annotto, liquid or solid; aniline dyes and coal tar dyes in bulk or packages of not less than one pound weight.
478. Antimony salts; antimony, or regulus of, not ground, pulverized or otherwise manufactured.
479. Artificial limbs.
480. Asphalt or asphaltum; bone pitch, crude only; and resin or rosin in packages of not less than one hundred pounds; and resin oil.
481. Anchors for vessels.
482. Bees.
483. Bells, when imported for the use of churches only.
484. Bismuth, metallic, in its natural state; blood albumen and tannic acid.
485. Blast furnace slag.
486. Blanketing and lapping, and discs or mills for engraving copper rollers, when imported by cotton manufacturers, calico printers, and wall paper manufacturers, for use in their own factories only.
487. Bolting cloth not made up.
488. Bones, crude, not manufactured, burned, calcined, ground or steamed.
489. Bookbinders' cloth.
490. Boracic acid, and borax, ground or unground, in bulk of not less than twenty-five pounds.
491. Bristles, broom corn and hair brush pads.
492. Brass and copper, old and scrap, or in blocks; and brass or copper in bolts, bars and rods in coil or otherwise, not less than six feet in length, unmanufactured, and brass or copper in strips, sheets or plates, not polished, planished or coated, and brass or copper tubing, in lengths of not less than six feet, and not polished, bent or otherwise manufactured, and copper in ingots or pigs.
493. Britannia metal in pigs, blocks or bars.

494. Buckram, when imported for the manufacture of hat and bonnet shapes.
495. Bullion, gold and silver, in ingots, blocks, bars, drops, sheets or plates, unmanufactured; gold and silver sweepings, and bullion or gold fringe.
496. Burr stones, in blocks, rough or unmanufactured, not bound up or prepared for binding into millstones.
497. Caplins, unfinished leghorn hats and manila hoods.
498. Casts, as models for the use of schools of design.
499. Cane and rattans, not manufactured; osiers or willows, and bamboos, unmanufactured, and bamboo reeds, not further manufactured than cut into suitable lengths for walking sticks or canes, or for sticks for umbrellas, parasols or sunshades.
500. Catgut or gut cord, for musical instruments; and catgut or worm gut, unmanufactured, for whip and other cord.
501. Celluloid, xylonite or xyolite in sheets, and in lumps, blocks or balls in the rough.
502. Chloride of lime, in packages of not less than twenty-five pounds weight; cobalt, ore of; oxide of cobalt, oxide of tin and oxide of copper; copper, precipitate of, crude; dragon's blood; gypsum, crude (sulphate of lime); lava, unmanufactured; manganese, oxide of; phosphorus; litharge; saffron, saffron cake, safflower, and extract of; sulphate of iron (copperas); sulphate of copper (blue vitriol); sulphur and brimstone, crude, or in roll or flour; tartar emetic and gray tartar; cream of tartar in crystals and argal or argols; verdigris, or sub-acetate of copper, dry; zinc, salts of, and tartaric acid crystals.
503. Chronometers and compasses for ships.
504. Citron, lemon and orange rinds in brine.
505. Clays, including china clay, fire clay and pipe clay; gannister and sand.
506. Coal, anthracite and anthracite coal dust; coke.
507. Coal and pine pitch, and coal and pine tar in packages of not less than 15 gallons.
508. Coir and coir yarn; raw cotton or cotton wool; and cotton waste, not dyed, cleaned, bleached or otherwise manufactured; cotton yarns, number forty and finer; and mohair yarns.
509. Communion plate, when imported for the use of churches.
510. Crucibles, clay or plumbago.
511. Curling stones.
512. Cups, brass, being rough blanks, for the manufacture of paper shells or cartridges, when imported by manufacturers of brass and paper shells and cartridges, for use in the manufacture of such articles in their own factories.
513. Diamonds, unset, diamond dust or bort and black, for borers; and diamond drills for prospecting for minerals, not to include motive power.
514. Domestic fowls, pure bred, for the improvement of stock, homing or messenger pigeons and pheasants and quails.
515. Drugs, crude, such as barks, flowers, roots, beans, berries, balsams, bulbs, fruits, insects, grains, gums and gum resins, herbs, leaves, nuts, fruit and stem seeds—which are not edible and which are in a crude state and not advanced in value by refining or grinding or any other process of manufacture and not otherwise provided for; egg yolk; fuller's earth, in bulk only, not prepared for toilet or other purposes; lead, nitrate and acetate of, not ground; litmus and all lichens, prepared or not prepared; musk, in pods or in grain; roots, medicinal, viz.:—alkanet, crude, crushed or ground, aconite, calumba, folia digitalis, gentian, ginseng, jalap, ipecacuanha, iris, orris root, licorice, sarsaparilla, squills, taraxacum, rhubarb and valerian, unground; vaccine and ivory vaccine points; gum chicle or sappato gum, crude; platinum and black

oxide of copper, for use in the manufacture of chlorate; potash, chloride of, not further prepared than ground, and free from admixture with any other substance; and bacteriological products or serum for subcutaneous injection.

516. Duck for belting and hose, when imported by manufacturers of such articles for use in the manufacture thereof in their own factories; and canvas or fabric, not frictionized, for the manufacture of bicycle tires when imported by the manufacturers of bicycle tires for use exclusively in the manufacture of bicycle tires in their own factories.

517. Dyeing or tanning articles, in a crude state, used in dyeing or tanning, n. e. s.; berries for dyeing or used for composing dyes; turmeric, nutgalls and extracts thereof; lac, crude, seed, button, stick and shell; indigo, indigo paste and extracts of, and indigo auxiliary or zinc dust; persis, or extract of archil and cudbear; terra japonica, gambier or cutch, extract of logwood, fustic, oak and oak bark and quebracho; camwood and sumac and extract thereof, tanner's bark, hemlock bark and oak bark; ground logwood, ground fustic, patent prepared dyes, and ground oak bark; iron liquor, solutions of acetate or nitrate of iron for dyeing and calico printing; madder and munjeet, or Indian madder, ground or prepared, and all extracts of; red liquor, a crude acetate of aluminium prepared from pyroligneous acid, for dyeing and calico printing.

518. Emery in bulk, crushed or ground.

519. Felt, adhesive for sheathing vessels.

520. Fertilizers, uncompounded or unmanufactured, including phosphate rock, kainite or German potash salts, German mineral potash, bone dust, bone black or charred bone and bone ash, fish offal or refuse, guano and other animal or vegetable manures.

521. Fiber, Mexican, natural, and tampico or istle and vegetable fibers; fibrilla, flax fiber and flax tow; grass, manila, esparto or Spanish, and other grasses, and pulp of, including fancy grasses, dried but not colored or otherwise manufactured; moss, Iceland, and other mosses, sea grass and seaweed, crude or in their natural state, or cleaned only; and kelp.

522. Fire bricks, for use in processes of manufacture, or for manufacturing purposes.

523. Fillets of cotton and rubber not exceeding seven inches wide, when imported by and for the use of manufacturers of card clothing in their own factories.

524. Fishhooks, for deep sea or lake fishing, not smaller in size than number 2.0; bank, cod, pollack and mackerel fish lines; and mackerel, herring, salmon, seal, seine, mullet, net and trawl twine in hanks or coil, barked or not,—in variety of sizes and threads,—including gilling thread in balls, and head ropes, barked marline, and net morsels of cotton, hemp or flax, and deep sea fishing nets or seines, when used exclusively for the fisheries, and not to include hooks, lines or nets commonly used for sportsmen's purposes.

525. Flint, flints and ground flint stones; feldspar, cliff, chalk, china or Cornwall stone, ground or unground; gravels; precious stones in the rough.

526. Florists' stock, viz.:—Palms, bulbs, corms, tubers, rhizomes, araucaria, spiræa and lilies of the valley; seedling stock for grafting, viz.: plum, pear, peach and other fruit trees; seeds, viz.: annotto, beet, carrot, flax, turnip, mangold, mustard, sowing rape seed and mushroom spawn; aromatic seeds which are not edible and are in a crude state, and not advanced in value or condition by grinding or refining or by any other process of manufacture, viz.: anise, anise star, caraway, cardamom, coriander, cumin, fennel and fenugreek; seed pease and seed beans from Britain; beans, viz.: tonquin,

vanilla and nux vomica, crude only, locust beans and locust bean meal, and cocoa beans, not roasted, crushed or ground; fruits, viz.: bananas, plantains, pineapples, pomegranates, guavas, mangoes and shaddocks; wild blueberries, wild strawberries and wild raspberries; and trees, n. e. s.

527. Fossils, shells, tortoise and mother-of-pearl, and other shells unmanufactured.
528. Foot grease, being the refuse of cotton seed after the oil has been pressed out, but not when treated with alkalies; and grease, rough, the refuse of animal fat for the manufacture of soap and oils only.
529. Fur skins of all kinds not dressed in any manner.
530. Goldbeaters' molds and goldbeaters' skins.
531. Gums, viz.:—Amber, Arabic, Australian, copal, dammar, elemy, kaurie, mastic, sandarac, senegal, shellac; and white shellac in gum or flake, for manufacturing purposes; and gum tragacanth, gum gedda and gum barbery.
532. Hair, cleaned or uncleaned, but not curled, dyed or otherwise manufactured; and horsehair not further manufactured than simply cleaned and dipped or dyed, imported by manufacturers of haircloth for use in the manufacture of such article in their own factories.
533. Hatters' furs, not on the skin, and hatters' plush of silk or cotton; and hatters' bands (not cords), bindings, tips and sides, hat sweats and linings both tips and sides, when imported by hat and cap manufacturers for use in the manufacture of these articles only in their own factories.
534. Hemp, undressed.
535. Hemp paper, made on four cylinder machines and calendered to between .006 and .008 inch thickness for the manufacture of shot shells; primers for shot shells and cartridges, and felt board sized and hydraulic pressed, and covered with paper or uncovered, for the manufacture of gun wads, when such articles are imported by manufacturers of shot shells, cartridges and gun wads, to be used for these purposes only in their own factories, until such time as the said articles are manufactured in Canada; Provided always that the said articles, when imported, shall be entered only at such port or ports as are named by the controller of customs, and at no other place; samples of such articles to be furnished to the collector of the said port or ports by the customs department for the guidance of the officers when accepting free entries of such materials.
536. Hides and skins, raw, whether dry, salted or pickled, and raw pelts.
537. Hoofs, horn strips, horn and horn tips, in the rough, not polished or otherwise manufactured than cleaned.
538. Hoop iron not exceeding ⅜ inch in width and being 25 gauge and thinner, used for the manufacture of tubular rivets.
539. Ice.
540. Indian corn, not for purposes of distillation and under customs regulations.
541. Ingot molds; iron sand or globules or iron shot and dry putty for polishing glass or granite.
542. Iron or steel masts, or parts thereof, and iron or steel beams, angles, sheets, plates, knees and cable chain for wooden, iron, steel or composite ships and vessels; and iron, steel or brass manufactures which at the time of their importation are of a class or kind not manufactured in Canada, when imported for use in the construction or equipment of ships or vessels.
543. Ivory and ivory nuts, piano key ivories and veneers of ivory unmanufactured.
544. Junk, old.
545. Jute and jute butts; and jute cloth, as taken from the loom, not colored, cropped, mangled, pressed, calendered nor finished in any way.

546. Jute, flax or hemp yarn, plain, dyed or colored, jute canvas, not pressed or calendered, when imported by the manufacturers of carpets, rugs and mats, jute webbing or jute cloth, hammocks, twines and floor oilcloth, for use in the manufacture of any of these articles only, in their own factories.
547. Lamp black and ivory black.
548. Lastings, mohair cloth, or other manufactures of cloth, when imported by manufacturers of buttons for use in their own factories, and woven or made in patterns of such size, shape or form, or cut in such manner as to be fit for covering buttons, exclusively. These conditions to be ascertained by special examination by the proper officer of customs, and so certified on the face of each entry.
549. Leeches.
550. Lime juice, crude only.
551. Locomotive and car wheel tires of steel in the rough.
552. Meerschaum, crude or raw.
553. Metal glove fasteners; papier-maché shoe buttons, shoe eyelets, shoe eyelet hooks, shoe lace wire fasteners, and sewing machine attachments.
554. Mineral waters, natural, not in bottle, under regulations prescribed by the controller of customs.
555. Machinery imported exclusively for mining, smelting and reducing, viz.:—Coal cutting machines except percussion coal cutters, coal heading machines, coal augers and rotary coal drills, core drills, miners' safety lamps, coal washing machinery, coke-making machinery, ore drying machinery, ore roasting machinery, electric or magnetic machines for separating or concentrating iron ores, blast furnace water jackets, converters for metallurgical processes in iron or copper, briquette making machines, ball and rock emery grinding machines, copper plates, plated or not, machinery for extraction of precious metals by the chlorination or cyanide processes, monitors, giants and elevators for hydraulic mining, amalgam safes, automatic ore samplers, automatic feeders, jigs, classifiers, separators, retorts, buddles, vanners, mercury pumps, pyrometers, bullion furnaces, amalgam cleaners, gold mining slime tables, blast furnace blowing engines, wrought iron tubing, butt or lap welded, threaded or coupled or not, not less than 2½ inches diameter, when imported for use exclusively in mining, smelting, reducing or refining.
556. Nickel; and ores of metal of all kinds; and silex or crystallized quartz.
557. Oakum.
558. Oils, viz.: Cocoanut and palm, in their natural state; and carbolic or heavy oil; oil of roses and ottar or attar of roses, and olive oil for manufacturing soap or tobacco, or for canning fish.
559. Oil cake and oil cake meal, cotton seed cake and cotton seed meal, and palm nut cake and meal.
560. Oysters, seed and breeding, imported for the purpose of being planted in Canadian waters.
561. Oleo-stearin and degras.
562. Palm leaf, unmanufactured.
563. Plaits, plain, not to include braid or fancy trimmings, composed of chip, manila, cotton, mohair, straw, tuscan and grass.
564. Platinum wire and platinum in bars, strips, sheets or plates; platinum retorts, pans, condensers, tubing and pipe, when imported by manufacturers of sulphuric acid for use in their works in the manufacture or concentration of sulphuric acid.

565. Potash, muriate and bichromate of, crude, caustic potash, and red and yellow prussiate of potash; also pot and pearl ash, in packages of not less than twenty-five pounds weight.
566. Prunella.
567. Pumice and pumice stone, ground or unground.
568. Quicksilver.
569. Quills in their natural state or unplumed.
570. Rags of cotton, linen, jute, hemp and woolen, paper waste clippings, and waste of any kind except mineral.
571. Rennet, raw and prepared.
572. Ribs of brass, iron or steel, runners, rings, caps, notches, ferrules, mounts and sticks or canes in the rough, or not further manufactured than cut into lengths suitable for umbrella, parasol or sunshade or walking sticks, when imported by manufacturers of umbrellas, parasols and sunshades for use in their factories in the manufacture of umbrellas, parasols, sunshades or walking sticks.
573. Rubber and gutta-percha, crude caoutchouc or india rubber, unmanufactured; powdered rubber and rubber waste; hard rubber in sheets but not further manufactured, and recovered rubber and rubber substitute.
574. Rolled round wire rods in the coil, of iron or steel, not over three-eighths of an inch in diameter, when imported by wire manufacturers for use in making wire in the coil, in their own factories.
575. Rubber thread, elastic.
576. Reeds, square or round, and raw-hide centers, textile leather or rubber heads, thumbs and tips, and steel, iron or nickel caps for whip ends, when imported by whip manufacturers, for use in the manufacture of whips in their own factories.
577. Rollers, copper, for use in calico printing, when imported by calico printers for use in their factories in the printing of calicoes and for no other purpose (such rollers not being manufactured in Canada).
578. Astrakhan or Russian hare skins and China goat plates or rugs, wholly or partially dressed, but not dyed.
579. Salt, imported from the United Kingdom or any British possession, or imported for the use of the sea or gulf fisheries.
580. Sausage skins or casings, not cleaned.
581. Scrap iron or scrap steel, old and fit only to be remanufactured, being part of or recovered from any vessel wrecked in waters subject to the jurisdiction of Canada.
582. Silk, raw or as reeled from the cocoon, not being doubled, twisted or advanced in manufacture in any way; silk cocoons and silk waste.
583. Silk in the gum or spun, when imported by manufacturers of silk underwear to be used for such manufacture in their own factories.
584. Silver, nickel and german, in ingots, blocks, bars, strips, sheets or plates, unmanufactured.
585. Steel rails weighing not less than 45 pounds per lineal yard for use only in the tracks of a railway which is employed in the common carrying of goods and passengers and is operated by steam motive power only; provided that this item shall not extend to rails for tracks of a railway which is used for private purposes only, nor shall this item extend to rails for use in the tracks of any electric railway, street railway, or tramway.
586. Soda, sulphate of, crude, known as salt cake, barilla or soda ash, caustic soda; silicate of soda in crystals or in solution; bichromate of soda, nitrate of soda or cubic niter, sal soda, sulphide of sodium, nitrite of soda, arseniate, binarseniate, chloride, chlorate, bisulphite and stannate of soda.

587. Spurs and stilts, used in the manufacture of earthenware.
588. Steel bowls for cream separators, and cream separators.
589. Steel saws and straw cutters cut to shape, but not further manufactured.
590. Crucible sheet steel, eleven to sixteen gauge, two and one-half to eighteen inches wide for the manufacture of mower and reaper knives, when imported by the manufacturers thereof for use for such purpose in their own factories.
591. Steel of number twenty gauge and thinner, but not thinner than number thirty gauge, for the manufacture of corset steels, clock springs and shoe shanks, when imported by the manufacturers of such articles for exclusive use in the manufacture thereof in their own factories.
592. Flat steel wire, of number sixteen gauge or thinner, when imported by the manufacturers of crinoline or corset wire and dress stays, for use in the manufacture of such articles in their own factories.
593. Steel valued at two and one-half cents per pound and upwards, when imported by the manufacturers of skates, for use exclusively in the manufacture thereof in their own factories.
594. Steel, under one-half inch in diameter, or under one-half inch square, when imported by the manufacturers of cutlery, or of knobs, or of locks, for use exclusively in the manufacture of such articles in their own factories.
595. Steel of number twelve gauge and thinner, but not thinner than number thirty gauge, for the manufacture of buckle clasps, bed fasts, furniture casters, and ice creepers, when imported by the manufacturers of such articles, for use exclusively in the manufacture thereof in their own factories.
596. Steel of number twenty-four and seventeen gauge, in sheets sixty-three inches long, and from eighteen inches to thirty-two inches wide, when imported by the manufacturers of tubular bow sockets for use in the manufacture of such articles in their own factories.
597. Steel for the manufacture of bicycle chain, when imported by the manufacturers of bicycle chain for use in the manufacture thereof in their own factories.
598. Steel for the manufacture of files, augers, auger bits, hammers, axes, hatchets, scythes, reaping hooks, hoes, hand rakes, hay or straw knives, windmills and agricultural or harvesting forks when imported by the manufacturers of such or any of such articles for use exclusively in the manufacture thereof in their own factories.
599. Steel springs for the manufacture of surgical trusses, when imported by the manufacturers for use exclusively in the manufacture thereof in their own factories.
600. Flat spring steel, steel billets and steel axle bars, when imported by manufacturers of carriage springs and carriage axles for use exclusively in the manufacture of springs and axles for carriages or vehicles other than railway or tramway, in their own factories.
601. Spiral spring steel for spiral springs for railways, when imported by the manufacturers of railway springs for use exclusively in the manufacture of railway spiral springs in their own factories.
602. Steel strip and flat steel wire when imported into Canada by manufacturers of buckthorn and plain strip fencing, for use in the manufacture of such articles in their own factories; and barbed fencing wire of iron or steel after January 1st, 1898.
603. Galvanized iron or steel wire number nine, twelve and thirteen gauge, after January 1st, 1898.
604. Stereotypes, electrotypes and celluloids of newspaper columns in any language other than French and English, and of books and bases and matrices and

copper shells for the same, whether composed wholly or in part of metal or celluloid.

605. Surgical and dental instruments (not being furniture) and surgical needles, after January 1st, 1898.

606. Tagging metal, plain, japanned or coated, in coils, not over one and a half inch in width, when imported by manufacturers of shoe and corset laces for use in their factories.

607. Tails, undressed.

608. Tea and green coffee imported direct from the country of growth and production, and tea and green coffee purchased in bond in the United Kingdom, provided there is satisfactory proof that the tea or coffee so purchased in bond is such as might be entered for home consumption in the United Kingdom.

609. Teasels,

610. Tin, in blocks, pigs, bars and sheets, tin plates, tin crystals, tin strip waste, and tin foil, tea lead.

611. Timber or lumber or wood, viz.: lumber and timber planks and boards of amaranth,cocoboral, boxwood, cherry, chestnut, walnut, gum wood, mahogany, pitch pine, rosewood, sandalwood, sycamore, Spanish cedar, oak, hickory, whitewood, African teak, black-heart ebony, lignum-vitæ, red cedar, redwood, satinwood and white ash, when not otherwise manufactured than rough sawn or split or creosoted, vulcanized or treated by any other preserving process; sawed or split boards, planks, deals and other lumber when not further manufactured than dressed on one side only or creosoted, vulcanized or treated by any preserving process; pine and spruce clapboards; timber or lumber hewn or sawed, squared or sided or creosoted; laths, pickets and palings; staves not listed or jointed of wood of all kinds; firewood, handle, heading, stave, and shingle bolts, hop poles, fence posts, railroad ties; hubs for wheels, posts, last blocks, wagon, oar, gun, heading and all like blocks or sticks rough hewn, or sawed only; felloes of hickory wood, rough sawn to shape only, or rough sawn and bent to shape, not planed, smoothed or otherwise manufactured; hickory billets and hickory lumber, sawn to shape for spokes of wheels, but not further manufactured; hickory spokes, rough turned, not tenoned, mitered, throated, faced, sized, cut to length, round tenoned or polished; shingles of wood; the wood of the persimmon and dogwood trees; and logs and round unmanufactured timber, ship timber or ship planking, not specially enumerated or provided for in this act.

612. D shovel handles, wholly of wood, and Mexican saddletrees and stirrups of wood.

613. Cork wood, or cork bark, unmanufactured.

614. Sawdust of the following woods: Armaranth, cocoboral, boxwood, cherry, chestnut, walnut, gum wood, mahogany, pitch pine, rosewood, sandalwood, sycamore, Spanish cedar, oak, hickory, whitewood, African teak, black-heart ebony, lignum-vitæ, red cedar, redwood, satinwood, white ash, persimmon and dogwood.

615. Tree nails.

616. Tobacco, unmanufactured, for excise purposes, under conditions of the inland revenue act, until July 1st, 1897.

617. Tubes, rolled iron not welded or joined, under one and one-half inch in diameter, angle iron, nine and ten gauge not over one and one-half inch wide, iron tubing lacquered or brass covered, not over one and one-half inch in diameter, all of which are to be cut to lengths for the manufacture

of bedsteads, and to be used for no other purpose, and brass trimmings for bedsteads, when imported by or for manufacturers of iron or brass bedsteads to be used for such purposes only in their own factories, until such time as any of the said articles are manufactured in Canada.

618. Turpentine, raw or crude.

619. Turtles.

620. After 1st January, 1898, binders' twine, or twine for harvest binders, of hemp, jute, manila or sisal, and of manila and sisal mixed, and all articles upon which duties are levied which enter into the cost of the manufacture of such twine, under regulations to be made by the controller of customs.

621. Ultramarine blue, dry or in pulp.

622. Varnish, black and bright, for ships' purposes.

623. Whalebone, unmanufactured.

624. Whiting or whitening, paris white and gilders' whiting, blanc fixe and satin white.

625. Wire, crucible cast steel.

626. Wire rigging for ships and vessels.

627. Wire, of brass, zinc, iron or steel, screwed or twisted, or flattened or corrugated, for use in connection with nailing machines for the manufacture of boots and shoes, when imported by manufacturers of boots and shoes, to be used for such purposes only in their own factories.

628. Steel wire, bessemer soft drawn spring, of numbers ten, twelve and thirteen gauge, respectively, and homo steel spring wire of numbers eleven and twelve gauge, respectively, when imported by manufacturers of wire mattresses, to be used in their own factories in the manufacture of such articles.

629. Wool and the hair of the camel, alpaca, goat, and other like animals, not further prepared than washed, n. e. s.; noils, being the short wool which falls from the combs in worsted factories; and worsted tops, n. e. s.

630. Wool or worsted yarns, when genapped, dyed or finished and imported by manufacturers of braids, cords, tassels, and fringes to be used in the manufacture of such articles only in their own factories.

631. Yarn spun from the hair of the alpaca or of the angora goat, when imported by manufacturers of braids for use exclusively in their factories in the manufacture of such braids only, under such regulations as are adopted by the controller of customs.

632. Yellow metal, in bolts, bars and for sheathing.

633. Zinc spelter and zinc in blocks, pigs, sheets and plates; and seamless drawn tubing.

634. Molasses, second process, or molasses derived from the manufacture of "molasses sugar," testing by polariscope less than 35 degrees, when imported by manufacturers of blacking, for use in their own factories, in the manufacture of blacking,—conditional that the importers shall, in addition to making oath at the time of entry that such molasses is imported for such use and will not be used for any other purpose, cause such molasses to be at once mixed in a proper tank made for the purpose with at least one-fifth of the quantity thereof of cod or other oil, whereby such molasses may be rendered unfit for any other use, such mixing to be done in the presence of a customs officer at the expense of the importer, and under such further regulations as are from time to time considered necessary in the interest and for the protection of the revenue, and that until such mixing is done and duly certified on the face of the entry thereof by such customs officer the entry shall be held to be incomplete and the molasses subject to the usual rate of duty as when imported for any other purpose.

635. Bags, barrels, boxes, casks and other vessels exported filled with Canadian products, or exported empty and returned filled with foreign products; and articles the growth, produce and manufacture of Canada, when returned after having been exported; provided that proof of the identity of such articles and goods shall be made under regulations to be prescribed by the controller of customs, and that such articles and goods are returned within three years from time of exportation, without having been advanced in value or improved in condition by any process of manufacture or other means; provided further that this item shall not apply to any article or goods upon which an allowance of drawback has been made, the reimportation of which is hereby prohibited except upon payment of duties equal to the drawback allowed; nor shall this item apply to any article or goods manufactured in customs or excise bonded warehouse and exported under any provision of law.

SCHEDULE C.

PROHIBITED GOODS.

636. Books, printed paper, drawings, paintings, prints, photographs or representations of any kind of a treasonable or seditious, or of an immoral or indecent character.

637. Reprints of Canadian copyright works, and reprints of British copyright works which have been copyrighted in Canada also.

638. Coin, base or counterfeit.

639. Oleomargarine, butterin or other similar substitute for butter.

640. Tea adulterated with spurious leaf or with exhausted leaves, or containing so great an admixture of chemical or other deleterious substances as to make it unfit for use.

641. Goods manufactured or produced wholly or in part by prison labor, or which have been made within or in connection with any prison, jail or penitentiary; also goods similar in character to those produced in such institutions, when sold or offered for sale by any person, firm or corporation having a contract for the manufacture of such articles in such institutions or by any agent of such person, firm or corporation, or when such goods were originally purchased from or transferred by any such contractor.

SCHEDULE D.

RECIPROCAL TARIFF.

On all the products of countries entitled to the benefits of this reciprocal tariff, under the provisions of section sixteen, the duties mentioned in Schedule A shall be reduced as follows:—

On and after the twenty-third of April, 1897, until the thirtieth day of June, 1898, inclusive, the reduction shall in every case be one-eighth of the duty mentioned in Schedule A, and the duty to be levied, collected and paid shall be seven-eighths of the duty mentioned in Schedule A.

On and after the first day of July, 1898, the reduction shall in every case be one-fourth of the duty mentioned in Schedule A, and the duty to be levied, collected and paid shall be three-fourths of the duty mentioned in Schedule A.

Provided, however, that these reductions shall not apply to any of the following articles, and that such articles shall in all cases be subject to the duties mentioned in Schedule A, viz.:—wines, malt liquors, spirits, spirituous liquors, liquid medicines and articles containing alcohol; sugar, molasses and sirups of all kinds, the product of the sugar cane or beet root; tobacco, cigars and cigarettes.

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Billets, hickory	611
iron or steel	226
steel, for manufacture of axles	600
Billiard tables, cues, and balls	340
Bills, advertising	126
of exchange, unsigned	128
Binarseniate of soda	586
Binding attachments	318
Bindings, hatters'	533
Binder twine	433, 620
Binders, chains for	318
Bird cages	287
Birds, skins of, for taxidermic purposes	463
Biscuits, sweetened	58
not sweetened	57
Bismuth, metallic, in its natural state	484
Bisulphite of soda	586
Bits, auger, steel for manufacture of	598
Bitters, n. o. p.	147
angostura, tafia, and similar alcoholic	7 (a)
Bituminous coal, round, etc	180
slack	179
Blackberries	75
Black, bone	520
crape	367
diamonds for borers	513
heart ebony, lumber, etc., of	611
sawdust of	614
ivory	547
lamp	547
oxide of copper, for manufacture of chlorate	515
varnish for ships' use	622
Blacking, shoe	164
molasses used for the manufacture of	634
Blades, knife, in the rough	285
Blanc fixé	624
Blankets, wool, worsted, hair of alpaca, goat, and like animals, n. e. s.	394
Blanketing and lapping imported by cotton manufacturers, calico printers, and wall-paper manufacturers	486
Blank forms, commercial, printed or lithographed	128
Blanks, axle, iron or steel, for railway vehicles, etc	246
Blanks, bolt, nut, and hinge, n. e. s.	279
celluloid lamp shade	286
corset	362
eye bar, flat, not punched or drilled	228
knife, in the rough	285
shovel, and iron or steel cut to shape for	291
spade, and iron or steel cut to shape for	291
Blast-furnace slag	485
blowing engines	555
water jackets	555
Blasting powder	412
Bleached cotton fabrics, n. o. p.	359
Bleaching, books on	464
Blind, embossed books for, etc	465
maps and charts for schools of	461
rollers	344
typewriters, tablets, and musical instruments for schools of	460
Blinds, window, of paper	138
not textile or paper	342
Blocks, lead	272
tin	610
aluminium	476
brass and copper in	492
britannia metal	493
burr stones, rough	496
celluloid, xylonite or xyolite in the rough	501
gold and silver bullion	495
gun, rough hewn or sawed only	611
heading, rough hewn or sawed only	611
inverted, earthenware	184
last and like blocks, rough hewn, etc.	611
nickel and german silver in	584
oar, rough hewn or sawed only	611
paving, of stone	194
phosphor bronze	299
wagon, rough hewn or sawed only	611
zinc in	633
Blood albumen	484
dragon's	502
Blooms, crop ends of	223
iron or steel	226
Blouses, ladies' and misses'	366
Blown-glass tableware	208
Blowing engines, blast furnace	555
Blueberries, wild	526
Blue prints	130
ultramarine, dry or in pulp	621
vitriol	502
Bluing, laundry	160
Board, felt, sized, etc., for manufacture of gun wads	535
mill	134
straw, in sheets or rolls	135
tarred	135
Boards, bagatelle	340
sawed, planed, jointed, etc	328
undressed or dressed on one side only, etc	611
wood, of certain kinds, when not otherwise manufactured than sawn; etc.	611

	Number of tariff item.
Boats, sail, open pleasure	410
life	472
sails for	380
Boilers composed wholly or in part of iron or steel, n. o. p.	315
Boiler tubes of wrought iron or steel	249
Bolsters	343
Bolt blanks, iron or steel, n. e. s.	279
Bolts, brass	492
copper	492
handle	611
heading	611
iron or steel, n. e. s.	279
stave	611
shingle	611
yellow metal in	632
Bolting cloth, not made up	487
Bolsters	343
Bonds, unsigned	128
Bone ash	520
black	520
charred	520
dust	520
pitch, crude	480
Bones, crude, not manufactured, etc.	488
Boneless fish	110
Bonnet shapes	403
Bonnets, n. e. s.	403
Bonnet shapes, buckram for manufacture of.	494
Bookbinding machines	313
Bookbinders' cloth	489
Books, viz, Bibles, prayer books, psalm and hymn books	464
British subjects dying abroad	454
donations of, for charitable purposes.	471
electrotypes, etc., of	604
embossed, for the blind	465
illustrated price	126
for the instruction of the deaf and dumb and blind	465
fly	424
mechanics' institutes, public free libraries, university, college, law libraries, etc.	467
not printed in Canada, for universities and colleges	467
viz, novels, etc., paper, bound or in sheets	124
railway, freight, and telegraph rates, in book and pamphlet form	124
pocket	424
printed in any other than French or English language, etc.	464
by any government or association for promotion of learning, etc.	466
and manufactured more than twelve years	468
n. e. s.	125
prohibited	636
scientific	464
'settlers'	455
Boot laces	405
Boots, n. e. s.	219
Boots, horse	280
india rubber	221
rubber, stockinettes for	383
wire (brass, steel, iron, and zinc), twisted, for manufacture of	627
Boracic acid	490
Borax, in bulk of not less than 25 pounds	490
Border papers	140
Borders, wall paper	138
Borers, black diamonds for	513
Bort, or diamond dust	513
Botanical specimens	463
Bottles, glass	208
Bottoms, tank sugar	436
Bow sockets, tubular, steel for	596
Bowls, steel, for cream separators	588
Boxes, collar	351
exported and returned	635
glove	351
handkerchief	351
hat	424
or skeins, cart	247
Boxed papers	140
Boxwood, lumber, etc., of	611
sawdust	614
Bracelets, n. o. p.	362
Braces, or parts thereof	404
Brads	259
Braids	362
alpaca or angora goat yarn for manufacture of	631
hair	362
wool or worsted yarn for manufacture of, etc.	630
Brandy	7 (a)
artificial	7 (a)
fruits preserved in	83
imitations	7 (a)
Brass band instruments	357
bars	492
blocks	492
bolts	492
buckles, n. o. p.	305
burrs, rivets, or washers	276
cups for manufacture of paper shells or cartridges	512
in sheets or plates	492
strips, etc.	492
manufactures of, n. o. p.	276
not manufactured in Canada for ships or vessels	542
nails and tacks	276
old	492
pumps	312
ribs for manufacture of umbrellas, parasols, etc.	572
rods	492
screws n. o. p.	260
scrap	492
trimmings for bedsteads	617
tubing	492
wire	265
cloth or woven wire	267

	Number of tariff item.
Brass wire, twisted, for manufacturers of boots and shoes	627
Brazil nuts	96
Bread knives	284
Breadstuffs, damaged by water in transit	45
Breeding oysters	560
Bricks, fire, for manufacturing purposes, etc.	522
n. e. s.	181
for building	181
paving	181
Bridge plate, universal mill	230
structural sections, n. e. s.	228
Bridges, iron or steel	242
Bright varnish for ships' use	622
Brimstone, crude, or in roll or flour	502
Briquette-making machines	535
Bristles	491
Britannia metal, manufactures of, not plated	292
in pigs, blocks, and bars	493
British copyright works, reprints of, copyrighted in Canada, prohibited	637
British gum	167
subjects dying abroad, personal and household effects of	454
Brocade powders	352
Bromine	477
Bronze, phosphor, in blocks, bars, sheets, and wire	299
powders	352
Broom corn	491
Brooms	330
Brushes	428
Brush cases	351
pads, hair	491
Buckle clasps, steel, 12 to 30 gauge, inclusive, for manufacture of	595
Buckles, n. o. p.	305
belt, or other jewelry	350
Buckram for manufacture of hat and bonnet shapes	494
Buckthorn fencing	263
wire, etc., for manufacture of	602
Buckwheat	37
meal or flour	46
Buddles	555
Buds, June	73
Buggies, n. e. s.	323
Builders' hardware	280
Building brick	181
plans, n. e. s.	130
stone, not hammered or chiseled	193
stone, dressed	194
structural sections, n. e. s.	228
Bulbs, crude drugs, n. o. p.	515
floral stock	526
glass, for electric lights	298
Bullets, lead	274
Bullion fringe	495
furnaces	555
gold and silver, in blocks bars, ingots, etc.	495
Buntings, to be dyed and finished in Canada, etc.	386
Burgundy pitch	477
Burners	297
Burnt siennas, n. e. s.	160
Burr stones, in blocks, rough	496
Burrs, brass and copper	276
Bushes, gooseberry, raspberry, currant, and rose	74
Busks, for corsets	362
Builders' nails and spikes	255
Butchers' steels and knives	284
Butter	31
cocoa	94
substitutes, prohibited	639
Butterin, prohibited	639
Butt hinges	280
Button lac	517
Buttons, cloth for manufacture of	548
collar, cuff, and recognition, not jewelry	426
pantaloon, metal	426
papier-maché, shoe	553
shoe, n. e. s.	426
all other, n. o. p.	426
Butts, jute	545

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Cabinets of coins	473
Cabinetmakers' hardware	280
Cabinet furniture	343
Cable, chain	542
Cables, covered	264
wire, n. e. s.	269
Cages, bird, parrot, squirrel, and rat	287
Cake, alum	476
cotton seed	559
meal oil	559
mustard	63
oil	559
palm nut	559
saffron	502
salt	586
Cakes, yeast	72
Calcareous tufa	477
Calendars, advertising	126
Calf leather, dressed, waxed, or glazed	212
Calico printing, copper rollers for use in	577
California prunes	77
Calumba root, unground	515
Camel hair fabrics, etc., to be dyed and finished in Canada, etc.	386
not further prepared than washed, n. e. s.	629
Camwood and extract thereof	517
Canada plates	234
Canadian copyright works, reprints prohibited	637
militia, certain articles for use of	450
Canary seed	61
Candied peel	438
Candles, n. e. s.	21
paraffin wax	22
Candy, sugar	438
Cane sirups, n. e. s.	440
split or manufactured, reed, etc., n. o. p.	326
unmanufactured	499

	Number of tariff item.
Canes, bamboo reeds cut into lengths for	499
umbrella, parasol, etc., rough or cut into lengths, etc	572
walking, n. e. s	335
Canned meats	15
oysters	117 118, 119
poultry and game	15
Canister powder	413
Cannon powder	413
Cannons	306
Canoes	410
Cant dogs	289
Canvas, jute, not pressed, etc., for manufacture of carpets, etc	546
to be used for boats and ships' sails	411
for manufacture of bicycle tires	516
Caoutchouc, crude	573
Capes, fur	407
Caplins	497
Caps, fur	407
n. e. s., and cap shapes	403
for manufacture of umbrellas, parasols and sunshades	572
for whip ends, of steel, iron, or nickel	576
percussion	306
Caraway seed, crude, not ground, etc	526
Carbolic oil	558
Carbon points	295
Carbons, electric light, n. e. s	295
over 6 inches in circumference	296
Carboys, glass	208
Cardamom seed, crude, not ground	526
Card clothing, cotton and rubber fillets for manufacture of	523
machine	316
Cards, curry	280
pictorial show	126
playing	137
printed or lithographed (commercial)	128
Carpentry, books on	464
Carpet bags	424
cork	398
linings	396
sweepers	343
Carpeting of cocoa, straw, hemp, or jute	396
Carpets, jute, hemp, or flax yarn, for the manufacture of	546
n. e. s	397
Carriage hardware, n. e. s	280
mats, n. e. s	395
oilcloth, enameled	398
Carriages, childrens'	323
for travelers	453
laden with merchandise	453
menagerie	458
n. e. s	323
Carrot seed	526
Cars, railway, running on lines crossing frontier	474
or other	324
Car-wheel tires of steel, in the rough	551
Cartridge belts and cases	306
Cartridges	306
brass cups for manufacture of	512
Cartridges, primers for the manufacture of	535
Cart skeins or boxes	247
Carts, hand	324
pleasure, n. e. s	323
settlers'	455
Carvers	284
Cases, cartridge	306
fancy	351
cigar and cigarette, and holders	423
for smokers' sets	423
musical instrument	424
show	339
watch	345
Cashmeres to be dyed or finished in Canada, etc	386
Cash registers	343
Casings, sausage, not cleaned	580
Caskets	338
Casks, etc., exported and returned	635
Cashmeres, wool, worsted, hair of alpaca, etc., n. e. s	394
Casters, steel for manufacture of	595
Castings, malleable iron, n. e. s	255
iron or steel in the rough, n. e. s	244
Casts, as models, for use of schools of design	498
Cast iron, scrap	224
pipe of every description	248
steel wire, crucible	625
Castile soap, mottled or white	24
Catalogues	126
Catgut, for musical instruments	500
unmanufactured, for whip cord, etc	500
Catsups	67
Cattle for improvement of stock	457
menagerie	458
Caustic potash	565
soda	586
"C.C." ware, decorated, printed, or sponged	185
Cedar, red, lumber and timber, planks, and boards of	611
sawdust	614
Spanish, lumber and timber, planks and boards of	611
sawdust	614
Celluloid balls and cylinders, molded, not finished	286
collars	365
cuffs	365
in sheets and in lumps, blocks, or balls in the rough	501
lamp-shade blanks	286
molded into sizes for knife and fork handles, not bored, etc	286
Celluloids, for almanacs, newspaper advertisements, etc., n. e. s	302
matrices or copper shells for	302
of books, etc., and matrices, bases and copper shells for same	604
newspaper columns	303
bases, matrices or copper shells for	303
Cement baths, tubs, and washstands	186

	Number of tariff item.
Cement, manufactures of, n. o. p.	181
including portland and hydraulic or water lime.	187
Centers, rawhide, for manufacture of whips.	576
Chain, bicycles, steel for manufacture of	597
shackles and links.	261
for binders.	318
cable	542
Chains, hair	362
iron or steel, $\frac{1}{16}$ of an inch and over..	261
Chalk stone	525
Chamois skins	212
Champagne	9
Chandeliers	297
Channels, rolled iron or steel, less than 35 pounds per lineal yard.	227
n. e. s	228
Charitable purposes, donations of clothing and books for	471
Charred bone	520
Charts, n. e. s.	130
admiralty	459
for use of schools for blind	461
Chases for printing	300
Chatelaine bags, frames, clasps, or fasteners for, not more than 7 inches wide	425
Checks, unsigned	128
Cheese	32
Chemical preparations, n. o. p.	147
Cherries, n. e. s.	75
Cherry lumber and timber, planks and boards of	611
sawdust	461
trees	73
Chestnut, lumber and timber, planks and boards of	611
sawdust	614
Chicle gum, crude	515
Chicory, kiln dried, roasted, or ground	92
raw or green	91
Children's carriages	323
Chilled iron or steel rolls	254
Chimney linings or vents and tops	184
Chimneys, lamp	208
China clay	505
goat plates or rugs, not dyed	578
stone	525
ware	185
Chip plaits	563
Chloralum	476
Chloride of aluminium	476
lime	502
soda	586
Chlorate of potash, ground only	515
soda	586
platinum and black oxide of copper, for manufacture of	515
Chloroform	146
Chocolate	93
paste	94
Chrome steel	235
Chromos, advertising	126
n. e. s	130
Chromotypes, advertising	126
n. e. s.	130
Chronometers	503
Church vestments	408
Churns	330
earthen or stone ware	182
Cider, clarified or refined	4
not clarified or refined	3
Cigarettes	442
Cigarette cases and holders therefor	423
Cigars	442
Cigar boxes, labels for	127
box nails	256
knives	284
cases and holders therefor	423
Cinnabar	477
Circulars	126
Citron rinds in brine	504
Clapboards, pine	611
spruce	611
Clasps, buckle, steel, 12 to 30 gauge for manufacture of	595
corset	362
for purses, etc., not more than 7 inches wide	425
Classifiers	555
Clay crucibles	510
manufactures of, n. o. p.	181
baths, tubs, and washstands	186
Clays, including china clay, fire clay, and pipe clay	505
Cleavers	289
Cleaners, amalgam	555
Cliff stone	525
Clippers, horse and toilet	284
Clippings, paper waste	570
iron or steel	223
Cloaks, fur	407
Clock keys	346
springs, steel, for manufacture of, etc..	591
Clocks and clock movements	346
Cloth, bookbinders'	489
bolting, not made up	487
emery	135
felt, n. e. s.	394
hair	379
jute, not otherwise finished than bleached, etc	374
as taken from the loom, etc	545
mohair, etc., for the manufacture of buttons	548
nun's, to be dyed and finished in Canada, etc.	386
oiled, india rubbered, flocked, or coated, n. o. p	385
paper, union collar, glossed or finished.	133
not glossed or finished	132
wire, of brass or copper	267
iron or steel	270
Clothesline wire	269
Clothes wringers	304
Clothing, card, cotton, and rubber fillets for manufacture of	523

	Number of tariff item.
Clothing, cotton, n. o. p.	362
donations of, for charitable purposes	471
horse, jute	375
india rubber	222
linen, n. o. p.	362
made waterproof with india rubber	222
machine card	316
mackintosh, certain cloths for manufacture of	381
military or naval, by and for use of army and navy	449
for use of Canadian militia	450
ready made, wool, worsted, hair, of alpaca, etc., n. o. p.	394
silk, n. o. p.	362
Cloths, horsehair for manufacture of	532
Italian, to be finished in Canada, etc.	386
not rubbered, etc., for manufacture of mackintosh clothing	381
tray, damask, of linen	361
table	361
of wool, worsted, hair of alpaca, goat, etc., n. e. s.	394
Clout nails	256
Coach screws, n. o. p.	260
Coal, anthracite	506
dust	506
augers and drills	555
bituminous, slack	180
cutters	315
cutting machines	555
heading machines	555
dust, n. e. s.	180
n. e. s.	180
oil fixtures, or parts thereof	297
illuminating, costing more than 30 cents per gallon	170
n. e. s.	173
pitch	507
tar	507
dyes, not less than 1 pound	477
washing machinery	555
Coarse salt, n. e. s	102
Coat linings, to be dyed and finished in Canada, etc.	386
Coated papers	140
sheet iron, 17 gauge and thinner	242
Coats, fur	407
Coatings, wool, worsted, hair of alpaca, goat, etc., n. e. s.	394
Cobalt, ore of	502
oxide of	502
Cochineal	477
Cocoa beans, not roasted, crushed, or ground.	526
butter	94
carpets, mats, and matting	396
nuts, n. e. s.	97
imported direct by vessel	98
nut, desiccated	99
paste	94
preparations of, n. e. s.	93

	Number of tariff item.
Cocoa shells and nibs	93
Cocoanut oil, natural	558
Cocoboral, lumber and timber, planks and boards of	611
sawdust	614
Cocoons, silk	582
Cocos	94
Cod-liver oil	154
fish lines	524
Coffee, condensed, with milk	34
extract of, and substitutes	90
green, n. e. s.	87
imported direct from country of growth, etc.	608
purchased in bond in the United Kingdom	608
roasted or ground, not imported direct.	88
and imitations and substitutes, n. e. s.	89
Coffins	338
Cogged ingots, iron or steel	226
Coil chain and links	261
Coin, base or counterfeit, prohibited	638
Coins, cabinets of	473
gold and silver, except United States silver coin	473
Coir	508
yarns	508
Coke	506
making machinery	555
Collar boxes	351
buttons, not jewelry	426
cloth paper, union, glossed or finished.	133
not glossed or finished	132
Collars of cotton, linen, xylonite, etc.	365
lace	362
light fixtures	297
Collections of medals, antiquities	473
postage stamps	473
Cologne water	7 (c)
Colored cotton fabrics, n. o. p.	360
Colors, dry, n. e. s.	159
ground in spirits	161
Columns, newspapers, celluloids, etc., of	604
Combing wools, such as are grown in Canada.	390
Combs, curry	280
for dress and toilet and mane combs	427
Comforters, bed, wool, etc.	394
Commercial blank forms	128
Commons, House of, articles by and for use of	450
Common soap	23
Communion plate imported for use of churches	509
Compasses for ships	503
Competition, animals for	456
Competitions, cups and prizes won in	473
Composition metal for manufacture of filled gold watch cases	349
ornaments	351
nails and spikes	258
or polish, n. o. p.	164
Compound, lard	18

	Number of tariff item.
Compound of bromine and potassium	477
Compressed yeast	71
Compressers, air	315
Concentrated melado	436
Concrete, sugar	436
Condensed coffee, with milk	34
milk	33
Condensers, platinum, by manufacturers of sulphuric acid, etc	564
Confectionery	438
labels for	127
Consuls-general, articles for use of	451
Converters, machinery	555
Cooks' knives	284
Coopers' nails	256
Copal gum	531
Copperas	502
Copper, black oxide of, for manufacture of chlorate	515
buckles, n. o. p	305
burrs, rivets, or washers	276
ingots	492
blocks	492
in pigs, bars, rods, and bolts	492
manufactures of, n. e. s	276
medals	473
nails and tacks	276
old and scrap	492
oxide of	502
plates, not planished or coated	492
mining machinery	555
precipitate of, crude	502
rivets	276
rollers for use in calico printing	577
sheets, not planished or coated	492
strips	492
sub-acetate of, dry	502
sulphate of	502
shells, for stereotypes, etc., of almanacs, etc., n. e. s	302
shells, for the stereotypes, etc., of books, etc	604
shells, for the stereotypes, etc., of newspaper columns	303
tubing	492
wire	266
cloth, or woven wire	267
Copyright works, prohibited	637
Cordage, n. e. s	431
Cord, gut, for musical instruments	500
Cordials, n. o .p	147
n. e. s	7 (*a*)
Cordovan leather, dressed, waxed, or glazed	212
Cords, n. o. p	362
hair	362
whip, to be dyed and finished in Canada, etc	386
wool or worsted yarn for manufacture of, etc	630
Core drills	555
Coriander seed, crude, not ground, etc	526
Cork bark, unmanufactured	613
manufactures of, n. o. p	327
carpet	398
Cork bark, matting	398
wood, unmanufactured	613
manufactures of, n. o. p	327
Corks	327
Corms, florist stock	526
Cornices and cornice poles	343
Corn, broom	491
flour	60
indian, for distillation	48
not for distillation	540
meal	47
pop	438
sirup	437
starch	60
n. e. s., in cans or other packages	66
Cornish rolls	315
Cornwall stone	525
Corrugated tubes or flues for marine boilers	249
Corsets	362
Corset blanks and busks	362
clasps	362
laces, tagging metal for manufacture of	606
steels	362
20 to 30 gauge, inclusive, for manufacture of, etc	591
wire, flat wire of steel, 16 gauge and thinner, for manufacture of	592
wires	362
Cotswold combing wools	390
Cottolene	18
Cotton absorbent	152
batts	358
batting	358
clothing, n. o. p	362
cloths of certain kinds for manufacture of waterproof clothing	381
collars	365
crochet, on spools, tubes, or in balls	371
cuffs	365
damask	361
duck, gray or white	384
embroideries, white	363
fabrics, articles made from, n. o. p	362
white or gray, n. o. p	359
printed, dyed, or colored, n. o. p	360
fillets, 7 inches and under wide, for card clothing	523
hatters' plush	533
hose, lined with rubber	222
net morsels	524
nettings	362
plaits	563
rags	570
raw	508
seamless bags	377
seed cake	559
meal	559
refuse, etc. (foot grease)	528
sewing thread, in hanks	370
on spools, tubes, or in balls	371
thread, n. e. s	371

	Number of tariff item.
Cotton wadding, sheet	358
warps, n. e. s.	358
waste	508
wool	508
surgical dressing	152
yarns, n. e. s.	358
No. 40 and finer	508
Counterfeit coin, prohibited	638
Counterpanes, wool, etc.	394
Coutils, imported by corset and dress-stay makers	364
Covered wire	264
corset wire	362
Covers, gun or pistol	306
Cranberries	76
Cranes	315
Crapes, black	367
Cream-colored ware, decorated, printed, or sponged	185
Cream separators and steel bowls for	588
sizing	167
of tartar in crystals	502
Creepers, ice, steel for manufacture of	595
Creosoted lumber or timber	611
Crinoline wire, flat wire, steel, 16 gauge and thinner, for manufacture of	592
Crochet cotton, on spools, tubes, or in balls	371
Crocks, earthen or stone ware	182
Crop ends of tin-plate bars, etc.	223
Crossings for railways	240
Crowbars	289
Crucibles, plumbago or clay	510
Crucible cast steel wire	625
sheet steel for mower and reaper knives	590
Crude acetate of aluminium, etc. (red liquor) for dyeing and calico printing	517
acetic acid	142
alkanet root	515
aniline oil	477
aromatic seeds, not edible, anise, caraway, etc.	526
beans, viz, Tonquin, vanilla, and nux vomica	526
bichromate of potash	565
bone pitch	480
bones, not manufactured, etc.	488
brimstone	502
caoutchouc	573
drugs, such as berries, beans, etc., not edible, etc., n. o. p.	515
dyeing or tanning articles n. e. s.	517
gum chicle or sappato gum	515
gypsum	502
iodine	477
lac	517
lime juice	550
meerschaum	552
moss	521
muriate of potash	565
oils, by manufacturers for fuel and gas purposes	172
opium	155
Crude petroleum, etc., by manufacturers for fuel purposes or for manufacture of gas	172
precipitate of copper	502
pyroligneous acid	142
rubber	679
sulphur	502
seaweed	521
sea grass	521
sulphate of soda	586
turpentine	618
Crushed alkanet root	515
emery in bulk	518
Crushers, ore, rock grain	315
Cryolite, mineral	477
Crystal glass tableware	208
Crystallized quartz	556
Crystals, cream of tartar	502
tartaric acid	502
tin	610
Cubic niter	586
Cudbear, extract of	517
Cue racks and tips	340
Cues, billiard and bagatelle	340
Cuff buttons, not jewelry	426
Cuffs of cotton, linen, xylonite, xyolite, or celluloid	365
Cultivators	318
Cumin seed, crude, not ground, etc.	526
Cups and other prizes won in bona fide competitions	473
Cups, brass, for shells or cartridges	512
Curled hair	429
Curling stones	511
Currant bushes	74
wine	8
Currants, n. e. s.	75
dried	77
Curry cards	280
combs	280
Curtains	362
Cut glass tableware	208
nails and spikes of iron or steel	255
tacks, brads, or sprigs	259
tobacco	443
Cutch	517
Cutlery, cases for	351
steel, under ½ inch, for manufacture of	594
n. o. p.	284
Cutters	323
coal and feed	315
straw, steel for, cut to shape only	589
Cutting machines, coal	555
paper	313
Cuttings, iron or steel	223
Cyanide of potassium	477
Cyanogen	477
Cyclometers	422
Cylinders, celluloid, molded, not finished	286

D.

Damask of linen or cotton	361
stair linen and diaper	361

	Number of tariff item.
Dammar gum	531
Dates	78
Deaf and dumb and blind, books for instruction of	465
Deals, sawed, undressed, or dressed on one side only, etc	611
planed, jointed, etc	328
Decanters, glass	208
Degras	561
Demijohns, earthen or stone ware	182
glass	208
Dental instruments	153,605
Derricks	315
Desiccated apples	78
cocoanut	99
fruits, n. e. s.	78
Desks, writing, fancy	351
Dextrin	167
Diagrams, wall	463
Diamond drills for prospecting for minerals	513
dust or bort	513
Diamonds, black, for borers	513
unset	513
Diaper linen	361
Dies for manufacture of jubilee medals	473
Diggers, post hole	290
potato	315
Digitalis, foliæ	515
Discs for engraving copper rollers, by cotton and wall-paper manufacturers and calico printers	486
Doeskins, wool, worsted, hair of alpaca, goat, etc., n. e. s.	394
Dogs, for improvement of stock	457
Dogwood	611
sawdust	614
Doilies	361
Dolls	351
Domestic fowls, pure bred, for improvement of stock	514
sewing machines	455
Dominion Government, articles imported by and for use of	450
Donations of clothing and books for charitable purposes	471
Dongola leather, dressed, waxed, or glazed	212
Door mats, n. e. s.	395
Doors, for safes and vaults	283
wire	343
Drafts, unsigned	128
Dragon's blood	502
Drain pipes, glazed or unglazed	184
tiles, not glazed	183
Drainings, sugar, drained in transit	436
Drawers	388
Drawings, prohibited	636
n. e. s.	130
Drawn tubing, zinc seamless	633
Drays	322
Dress combs	427
goods, women's and children's, to be finished in Canada, etc	386
stays, flat wire of steel, 16 gauge and thinner, for manufacture of	592
Dressing, shoe, harness, and leather	164
surgical, antiseptic	152
Dried apples	78
currants	77
fruits, n. e. s	78
fish, n. e. s., in barrels or half barrels	114
not imported in barrels	109
Driers, japan	168
liquid	168
Drills, diamond, for prospecting for minerals	513
rock	315
core and rotary, coal	555
seed	318
Drops, medicinal, n. o. p	147
gold and silver bullion	495
Drugs, crude, such as berries, beans, etc., not edible, etc., n. o. p.	515
Dry colors, n. e. s.	159
fillers, n. e. s.	160
plates, photographic	419
putty for polishing glass or granite	541
sub-acetate of copper verdigris	502
ultramarine blue	621
white and red lead, orange mineral, and zinc white	158
Drying machinery, ore	555
"D" shovel handles of wood	612
Duck, cotton, gray or white	384
for belting and hose, when imported by manufacturers of such articles	516
Dumb and deaf and blind, books for instruction of	465
Dust, coal, anthracite	506
diamond	513
zinc	517
Dusters, lap, of all kinds	389
Dutch metal leaf	352
Dyed cotton fabrics, n. o. p.	360
hair	429
Dyes, aniline, not less than 1 pound	477
berries for composing	517
coal tar, not less than 1 pound	477
patent, prepared	517
Dyeing articles, crude, n. e. s.	517
berries for	517
books on	464
Dynamos, electric	294

E.

Earth, fuller's	515
Earths, ochrey	159
Earthenware, brown or colored	185
bath tubs and washstands	186
demijohns, churns, or crocks	182
stilts and spurs, used in manufacture of	587
tiles	184
n. e. s.	185
Ebony, black heart, lumber and timber, planks and boards of	611
sawdust	614
Edging knives	290

	Number of tariff item.
Effects, personal and household, of British subjects dying abroad	454
left by bequest	454
settlers'	455
Egg yolk	515
Eggs	30
Elastic, garter	362
rubber thread	575
round or flat	362
webbing	400
Elder wine	8
Electric apparatus, n. e. s	294
batteries	294
belts	152
dynamos	294
generators	294
machinery for separating, etc., iron ores	555
motors	294
sockets	294
light, glass bulbs for	298
carbons, or carbon points, n. e. s	295
fixtures or parts	297
Electroplated ware	293
Electrotypes of almanacs, newspaper advertisements, etc., n. e. s	302
etc., matrices or copper shells for	302
books, etc., and matrices, copper shells, and bases for	604
newspaper columns	303
matrices, etc., for	303
Elemy gum	531
Elevators for hydraulic mining	555
Elixirs, alcoholic, n. e. s	7 (*b*)
Embossed books for the blind	465
Embossing machines	313
Embroideries, n. e. s	362
white cotton	363
Embroidery silk	373
Emery in bulk, crushed or ground	518
grinding machines, rock	555
manufactures of	420
paper or cloth	135
wheels	420
Emetic, tartar	502
Enamel sizing	167
Enameled floor, etc., oilcloth	398
iron or steel, agate or granite hollow ware	307
ware, n. e. s	308
Enameled leather	215
Ends, crop, of tin-plate bars, etc	223
Engineering, books on	464
Engines, fire	311
blast furnace blowing	555
steam, portable and parts	315
n. e. s	315
Engraved plate	301
Engravings, n. e. s	130
Entomological specimens	463
Envelopes	140
Eraser knives	284
Esparto grass	521
Essences, alcoholic, n. e. s	7 (*b*)
fruit, spirituous or ethereal, n. e. s.	7 (*b*)
n. o. p	147
Essential oils	177
Ether, nitrous	7 (*d*)
sulphuric	146
Ethereal fruit essences, n. e. s	7 (*b*)
Ethyl alcohol	7 (*a*)
hydrated oxide of	7 (*a*)
Evaporated apples	78
fruits, n. e. s	78
Exchange, bills of, unsigned	128
Exhibition, animals for	456
Explosives, other	414
glycerin, for the manufacture of	415
Extinguishing machine, fire	311
Extract, archil and cudbear	517
camwood and sumac	517
of coffee, n. e. s., or substitutes therefor	90
indigo	517
logwood, fustic, oak, and oak bark	517
madder, munjeet or Indian madder	517
malt (nonalcoholic) for medicinal purposes	69
saffron and safflower	502
turmeric and nutgalls	517
Extracts, alcoholic, n. e. s	7 (*b*)
of meat	15
Eye bar blanks, flat, not punched or drilled	228
Eyeglass frames, parts of	211
Eyeglasses	210
Eyelet hooks, shoe	553
Eyelets, shoe	553
Eyes for picks, mattocks	289

F.

Fabric for manufacture of bicycle tires	516
cotton or linen articles made from, n. o. p	362
gray or white, n. o. p	359
printed, dyed, or colored	360
plush, n. e. s	368
silk	368
wool, worsted, hair of alpaca, goat, etc., n. e. s	394
etc., to be dyed, etc., in Canada	386
Facings, foundry	355
Family plate, left by bequest	454
Fancy articles, n. e. s	351
grasses, dried, but not colored, etc	521
Fanning mills	315
Fans	351
Farina	60
Farm wagons	315
rollers	290
Farriers' knives	284

	Number of tariff item.
Fashion plates, tailors', mantle makers' and milliners'	469
Fasteners, glove, metal	553
shoe lace, wire	553
for purses, etc	425
Featherbone	382
Feathers, undressed	28
n. e. s	29
Feed cutters	315
Feeders, automatic, mining	555
Feldspar	525
Felloes of hickory, rough hewn or sawn only	611
Felt, adhesive, for sheathing vessels	519
Felt board, sized, etc., for manufacture of gun wads	535
cloth, n. e. s	394
pressed, not filled or covered with any woven fabric	378
Fence posts	611
Fencing, barbed wire, iron or steel	602
buckthorn strip	263
foils and masks	306
galvanized wire, Nos. 9, 12, and 13 gauge	262
iron or steel, n. e. s	263
woven wire	263
steel wire for manufacture of	602
Fennel seed, crude, not ground, etc	526
Fenugreek seed, crude, not ground, etc	526
Ferromanganese	225
Ferrosilicon	225
Ferrules, for manufacture of umbrellas, etc	572
Fertilizers, compounded or manufactured	417
uncompounded or unmanufactured	520
Fiber, flax	521
Mexican	521
ware, manufactures of, n. e. s	341
indurated	341
vulcanized	341
Fibers, vegetable, tampico and istle	521
Fibrilla	521
Fiction, works of, unbound, etc	124
Field rollers	290
seed, n. o. p	61
Figs	78
Files	288
manicure	284
steel for manufacture of	598
Fillers, dry and liquid	160
Fillets of cotton or rubber, 7 inches and less wide, for card clothing	523
Films for photographs	123
Fine salt, in bulk, n. e. s	102
Finish, oil, n. e. s	168
Firearms	306
Fire bricks for manufacturing purposes, etc	522
brick, n. e. s	181
clay	502
crackers	416
engines and extinguishers	311
Fireproofs, n. e. s	160
Firewood	611
Fireworks	416
Fish, anchovies, in tin boxes	111
any other form	112
and fishing, books on	464
all other, pickled or salted, in barrels	108
boneless	110
foreign caught, otherwise than in barrels or half barrels, n. o. p	109
fresh or dried, n. e. s., in barrels or half barrels	114
herrings, pickled or salted	105
hooks, n. e. s	319
for deep sea or lake fishing	524
labels for	127
lines, not sporting	524
mackerel	104
nets, deep sea	524
sportsmen's	434
offal or refuse	520
oils	122
oysters, in the shell	120
cans, not over 1 pint	117
over 1 pint but not over 1 quart	118
over 1 quart	119
shelled, in bulk	116
packages containing, n. o. p	121
plates, railway	239
preserved in oil, except anchovies, etc	113
prepared and preserved, all other, n. o. p	115
salmon, fresh	106
pickled or salted	107
sardines, in tin boxes	111
any other form	112
seines	524
skins	463
smoked	110
twines, to be used in making nets and seines	524
Fisheries, articles product of, n. o. p	122
Fishing bait, sportsmen's	319
lines, not sporting fishing tackle, etc	524
rods	335
Fittings, iron and steel	254
Fixtures, gas, coal oil, and electric light, or parts	297
Flagstones, not hammered or chiseled	193
dressed	194
Flake, white shellac in, for manufacturing purposes	531
Flannels, wool, worsted, hair of alpaca, etc., n. e. s	394
Flasks, glass	208
Flat wire of steel, 16 gauge and thinner, for manufacture of crinoline, corset wires, and dress stays	592
spring steel for manufacture of axles, etc	600
steel wire for manufacture of fencing	602
Flats, iron or steel, rolled	229
Flax fiber	521
hemp and jute combined, manufactures of	376

	Number of tariff item.
Flax, manufactures of, n. e. s.	376
net, morsels of	524
sail twine, to be used for boats' and ships' sails	411
seed, crude, etc.	526
oil	169
tow	521
yarn, by manufacturers of carpets, rugs, mats, etc.	546
Flint	525
paper	135
stones, ground	525
Flints	525
Flooring, mosaic	200
Floor oilcloth, enameled	398
jute canvas for the manufacture of	546
Florist stock, viz, palms, bulbs, etc.	526
Flour, brimstone in	502
buckwheat	46
corn	60
damaged by water in transit	45
rice	53
rye	41
sago	53
sulphur in	502
wheat	56
Flower bulbs of all kinds	526
odors, preserved in fat, etc.	148
Flowers, artificial	430
crude drugs, not edible, etc., n. o. p.	515
Flues for marine boilers	249
Fluid beef, not medicated	15
Fly sheets, advertising	126
hooks	319
books	424
Fodder cutters	315
Foil, tin	610
Foils, fencing	306
Folders, advertising	126
Folding machines	313
Foliæ digitalis	515
Foods, milk, and similar preparations	34
Foot grease, cotton-seed refuse, etc.	528
Foreign leaf tobacco, unstemmed	445
stemmed	446
Forestry, books on	464
Forgings, iron and steel, n. e. s.	243
Forks, pronged	290
table and carving	284
iron or steel, in the rough	285
agricultural and harvesting, steel for	598
Forms, commercial blanks, printed or lithographed	128
Fossils	527
Foundry facings	355
Fowls, domestic, pure bred, for improvement of stock	514
Frames, picture and photograph	336
for purses, etc.	425
spectacle and eyeglass, parts of	211
Freight cars, running on lines crossing frontier, etc.	474
wagons	322
Freight rates, for railways	124
French odors, preserved in oil, etc.	148
Fresh fish, n. e. s., in barrels or half barrels	114
otherwise than in barrels or half barrels	109
lamb	16
meats, n. e. s.	14
mutton	16
salmon	106
tomatoes	65
Fringe, bullion	495
Fringes	362
wool or worsted yarn for manufacture of	630
Frogs for railways	240
Fruit essences, spirituous or ethereal, n. e. s.	7 (*b*)
Fruit juices containing spirits	5
n. o. p.	6
plants, n. e. s.	74
sirups, n. o. p.	6
trees, seedling stock for grafting	526
Fruits in air-tight cans and other packages	82
viz, bananas, plantains, pineapples, pomegranates, guavas, mangoes and shaddocks, wild blue, straw, and raspberries	526
crude drugs, not edible, etc., n. o. p.	515
dried, desiccated, or evaporated, n. e. s.	78
labels for	127
preserved in brandy or in other spirits	83
Fruit seeds, crude drugs, not edible, etc., n. o. p.	515
Fuel oils, by manufacturers for fuel purposes or for manufacture of gas	172
Fuller's earth	515
Fur caps, hats, muffs, tippets, capes, coats, and cloaks	407
skins, not dressed in any manner	529
wholly or partially dressed	406
other manufactures of, n. o. p.	407
Furs, hatters', not on the skin	533
Furnace slag, blast	485
Furnaces, bullion	555
Furniture of wood, iron, or other material	343
British subjects dying abroad	454
household, settlers' effects, etc.	455
springs	343
casters, steel for manufacture of	595
Fusel oil	7 (*a*)
Fustic, extract of	517
ground	517

G.

Galleries, light fixtures	297
Galvanic batteries	294
Galvanized sheet iron or steel, manufactures of, n. o. p.	309
wire, 9, 12, and 13 gauge, for fencing	262, 603
Gambier	517
Game bags	306
canned	15
n. o. p.	17
Gannister	505

	Number of tariff item.
Garden seeds, n. o. p	61
sprinklers	312
Garter elastic	362
Gas fixtures or parts thereof	297
Gas meters	282
oils, by manufacturers for fuel purposes, etc	172
Gauzes, surgical dressing	152
Gedda, gum	531
Gelatin	27
Generators, electric	294
Gentian root, unground	515
Geographical globes	461
German looking glass	207
mineral potash	520
potash salts	520
silver, manufactures of, not plated	292
ingots, etc	584
Giant powder	414
Giants, hydraulic mining	555
Gilders' whiting	624
Gilling thread	524
Gilt ware, plated	293
Gin of all kinds, n. e. s	7 (a)
Ginger	101
preserved	84
wine	7 (e)
Ginseng root, unground	515
Girders, rolled iron or steel, less than 35 pounds per lineal yard	227
n. e. s	228
Glasses, watch	346
Glass, all other, and manufactures of, n. o. p.	209
balls	208
bent plate	209
bottles and decanters	208
bulbs for electric lights	298
carboys and demijohns	208
figured, enameled, and obscured, white	202
flasks and phials	208
globes, shades, and lamp chimneys	208
iron sand and dry putty, etc., for polishing	541
jars	208
looking, German, unsilvered	207
muffled	201
ornamental, figured and enameled, colored	202
painted and vitrified	202
paper	135
plain, colored, stained, tinted, or muffled, etc., in sheets	201
plate, not over 25 square feet, not beveled	203
n. e. s., not beveled	204
rolled, rough	202
beveled, n. o. p	205
silvered	206
tableware, blown	208
cut, pressed, or molded	208
window, common and colorless	201
memorial, etc., n. o. p	202
windows, stained	202

	Number of tariff item.
Glaziers' knives	284
Globes, geographical, topographical, etc	461
glass	208
Globules, iron, for polishing granite or glass	541
Glove boxes or cases	351
fasteners, metal	553
leathers	214
Gloves of all kinds	402
Glucose	437
sirup	437
Glue	27
Glycerin for manufacture of explosives	415
Goat hair fabrics, to be dyed and finished in Canada	386
and manufactures, n. e. s	394
or wool, washed only, n. e. s	629
manufactures, viz, blankets, etc., n. e. s	394
plates or rugs, China, not dyed	578
wearing apparel or ready-made clothing, n. e. s	394
(angora) yarn, for manufacture of braids	631
Goat leather	212
Gold beater's molds	530
skins	530
bullion, in bars, blocks, ingots, etc	495
coin	473
fringe	495
leaf	352
liquid paint	352
manufactures of, n. e. s	350
medals	473
mining slime tables	555
sweepings	495
Gongs, n. e. s	276
Goods, dress, wool, worsted, etc., to be finished in Canada, etc	386
manufactured by prison labor, prohibited	641
unenumerated	447
Gooseberry bushes	74
Gooseberries, n. e. s	75
Government, Dominion, articles imported by and for use of	450
Governor-general, articles for use of	448
Grain crushers	315
damaged by water in transit	45
Grains, crude drugs, not edible, etc., n. o. p	515
musk in	515
Grafting, seedling stock for	526
Granite and manufactures, n. e. s	195
iron sand, dry putty, etc., for polishing	541
not hammered or chiseled	193
sawn only	194
ware, hollow	307
white	185
Grape sugar	437
vines	74
Grapes	79
Grass, manila, esparto, or Spanish, etc	521
plaits	563
pulp of	521

	Number of tariff item.
Grasses, fancy, dried only	521
Gravels	525
Gray tartar	502
cotton fabrics	359
Grease, axle	175
foot, refuse of cotton seed, etc	528
rough, refuse of animal fat, for manufacture of soap and oils	528
Green chicory	91
coffee, imported direct, etc	608
n. e. s	87
paris, dry	162
Grindstones, not mounted, not less than 36 inches in diameter	191
n. e. s	192
Grinding machines, rock emery	555
Ground alkanet	515
chicory	92
coffee, not imported direct	88
and imitations, etc	89
emery, in bulk	518
flintstones	525
fustic	517
logwood	517
mustard	62
oak bark	517
spices, n. e. s	101
Guano	520
Guavas	526
Gum, amber, Arabic, and Australian	531
barberry	531
British	167
chicle	515
copal	531
dammar and elemy	531
gedda	531
kaurie	531
mastic	531
resin, crude drugs not edible, etc., n. o. p	515
sandarac, senegal, and shellac	531
sappato	515
tragacanth	531
white shellac, for manufacturing purposes	531
wood, lumber and timber, planks and boards of	611
sawdust	614
Gums, crude drugs, not edible, etc., n. o. p	515
sweetened	438
Gun blocks, rough hewn or sawed only	611
covers	306
powder	413
felt board for manufacture of	535
Guns	306
settlers'	455
Gut cord for musical instruments	500
worm, unmanufactured, for whip and other cord	500
Gutta-percha hose, packing, etc	222
crude	573
manufactures of, n. o. p	221
unmanufactured	573
Gypsum, crude	502
Gypsum, ground, not calcined	188
calcined or manufactured	189

H.

	Number of tariff item.
Hacking knives	284
Hair brush pads	491
Hair of camel, goat, etc., washed only, n. e. s	629
cleaned or uncleaned, not curled, etc	532
cloth of all kinds	379
curled or dyed	429
horse, for manufacture of horsehair cloths	532
manufactures of	362
mattresses	343
oils, nonalcoholic	149
pins, jewelry	350
skins, Russian, etc	578
washes, alcoholic	7 (c)
Hammered iron or steel bars or shapes, n. o. p	243
Hammers	289
steel for manufacture of	598
Hammocks	434
Handcarts	324
Handkerchief boxes or cases	351
Handkerchiefs	362
Handle bolts	611
Handles, umbrella, parasol, etc., n. e. s	337
"D," shovel, wood	612
Hand rakes, steel for	598
Hangings, paper	138
Hard rubber in sheets, but not further manufactured	573
Hardware, builders', cabinetmakers', upholsterers', etc	280
carriage, n. e. s	280
Harness dressing	164
leather	212
makers' hardware	280
menagerie	458
and saddlery, n. e. s	280
soap	164
Harrows	318
Harvest binder twine	433, 620
Harvesters without binders	318
self binders	318
Harvesting forks, steel for	598
Hatchets	289
steel for manufacture of	598
Hat boxes	424
pins, jewelry	350
sweats and linings, both tips and sides	533
shapes, buckram for the manufacture of	494
Hats, fur	407
leghorn, unfinished	497
n. e. s. and hat shapes	403
Hatters' bands	533
bindings, tips, and sides	533
furs, not on the skin	533
irons	245
plush of silk or cotton	533
Hay	42
knives	290
steel for	598
tedders	315

	Number of tariff item.
Heading blocks, rough hewn or sawed only..	611
bolts	611
machines, coal	555
Headlights	297
Head ropes	524
Heads for whips, rubber or textile leather...	576
Heavy oil (carbolic)	558
Heirlooms, left by bequest	454
Hemlock bark	517
Hemp bags or sacks	377
carpets, mats, and matting	396
flax, and jute combined, manufactures of	376
manufactures of, n. e. s.	376
net, morsels of	524
paper for manufacture of shot shells..	535
rags	570
sail twine, to be used for boats' and ships' sails	411
seeds	61
twine for harvest binders	433,620
undressed	534
yarn, by manufacturers of carpets, twines, etc	546
Henriettas, to be dyed and finished in Canada.	386
Herbs, crude drugs, not edible, etc., n. o. p..	515
Herring-net twine	524
Herrings, pickled or salted	105
Hewn timber	611
Hickory billets	611
felloes	611
lumber, sawn for spokes	611
and timber, planks and boards of	611
sawdust	614
spokes, rough turned, not tenoned, mitered, etc	611
Hides, raw	536
Hinge blanks, n. e. s.	279
Hinges, T and strap	279
butt	280
Hoes	290
steel for manufacture of	598
Hogs, live	12
Holders, cigar and cigarette, and cases	423
shade	297
Hollow ware, agate, granite, or enameled iron or steel	307
iron or steel, plain, etc	308
n. e. s.	308
Homing pigeons	514
Homo steel, spring wire for mattresses	628
Honey and imitations	86
Hoods, manila	497
Hoofs in the rough, not polished, etc	537
Hooks, eyelet	553
fly and fishing, n. e. s.	319
for deep sea and lake fishing	524
reaping	290
steel for	598
Hoop iron, for tubular rivets	538
or steel, 18 gauge and thicker, etc.	229
thinner than 18 gauge, n. e. s	234

	Number of tariff item.
Hoop steel, more than 2½ cents per pound...	236
Hop poles	611
Hops	70
Horn in the rough, not polished, etc	537
strips in the rough	537
tips	537
Horse boots	280
clippers	284
clothing, jute	375
hair, not further manufactured than dyed, etc	532
powers and parts	315
rakes	318
shoe nails	256
shoes	256
Horses for improvement of stock	457
menagerie	458
Horticulture, books on	464
Hose, cotton or linen, lined with rubber	222
duck for, when imported by manufacturers	516
gutta-percha or rubber	222
Hosiery, n. e. s	388
House of Commons, articles imported by and for use of	450
House furniture	343
Household effects of British subjects dying abroad	454
furniture, settlers'	455
hollow ware, n. e. s.	308
Hubs, rough hewn or sawn only, for wheels..	611
Hungarian nails	256
Hunters' knives	284
Hydrated oxide of ethyl	7 (*a*)
Hydraulic cement	187
Hydrogen, solution of peroxides of	146
Hymn books	464

I.

Ice	539
creepers, steel for manufacture of	595
Iceland moss, crude, or cleaned only	521
Illuminating oils, costing more than 30 cents per gallon	170
Illustrated advertising periodicals	126
price lists, etc	126
Illustrations of insects, pictorial, for colleges, etc	461
Imitations of brandy	7 (*a*)
honey	86
precious stones, polished, not set, etc	384
roasted or ground coffee	89
Turkish, etc., rugs and carpets.	397
Implements, agricultural, plates for, cut to shape, but not molded, etc	317
n. e. s.	290
settlers'	455
Improvements in the arts	475
of stock, animals for	457
fowls for	514
India-rubber boots and shoes	221
clothing, etc	222

	Number of tariff item.
India rubber, manufactures of, n. o. p.	221
unmanufactured	573
Indian corn for distillation	48
not for distillation	540
madder, ground or prepared, and extract of	517
Indigo	517
auxiliary	517
extract of	517
paste	517
Indurated fiber	341
Industrial books	464
Ingot molds	541
Ingots, aluminium	476
cogged, iron or steel	226
copper	492
gold and silver bullion	495
iron or steel	226
nickel and german silver in	584
Ink for writing	163
shoemakers'	164
Insects, crude drugs, not refined, etc., n. o. p.	515
pictorial illustrations of, for colleges, etc	461
Insides, album, paper	461
Instruments, brass band	357
musical, for army and navy	449
Canadian militia	450
schools of the blind	460
settlers'	455
n. o. p.	356
philosophical, for colleges, etc.	462
photographic, mathematical, and optical, n. e. s.	422
surgical and dental	153, 605
telephone and telegraph	294
Insulators of all kinds	294
Insurance maps	461
Intersections for railways	240
Inventions, models of	475
Inverted blocks, earthenware	184
Iodine, crude	477
Ipecacuanha root, unground	515
Iris root, unground	515
Iron, acetate of (iron liquor)	517
angle, for manufacture of bedsteads	617
angles, rolled, n. e. s.	228
less than 35 pounds per lineal yard, n. o. p.	227
for vessels	542
articles, manufactures of, etc., n. o. p.	321
axles, axle bars, etc., for railway vehicles, etc	246
band, 8 inches or less wide, 18 gauge and thicker, n. e. s.	229
thinner than 18 gauge, n. e. s.	234
bar, rolled	229
bars, pieces, punchings, and clippings of, etc	229
hammered, n. o. p.	243
beams for vessels	542

	Number of tariff item.
Iron, beams, rolled, not less than 35 pounds per lineal yard	227
n. e. s.	228
billets	226
blooms	226
boilers and machinery, n. e. s.	315
boiler tubes, wrought	249
bolt blanks	279
bolts	279
brads, shoe tacks, sprigs, and tacks, n. o. p.	259
bridges	242
buckles, n. o. p.	305
building or bridge structural sections, n. e. s.	228
caps for whip ends	576
castings in the rough, n. e. s.	244
chains, $\frac{1}{16}$ of an inch and over	261
channels, not less than 35 pounds per lineal yard	227
rolled, n. e. s.	228
column sections, etc., n. e. s.	242
cut to shape for spade and shovel blanks	291
enameled, agate, etc., hollow ware	307
ware, n. e. s.	308
eye bar blanks, n. e. s.	228
fencing, barbed wire	602
buckthorn strip, etc	263
flats	229
flues, wrought, for marine boilers	249
forgings, n. e. s.	243
forks, table, in the rough	285
furniture, house, cabinet, or office	343
galvanized, manufactures of	309
girders, rolled, not less than 35 pounds per lineal yard	227
n. e. s.	228
globules for polishing granite or glass	541
hinge blanks	279
hinges, T and strap	279
hollow ware, n. e. s.	308
hoop, for tubular rivets	538
8 inches or less wide, 18 gauge and thicker, n. e. s.	229
thinner than 18 gauge, n. e. s.	234
ingots and cogged ingots	226
joists, rolled, n. e. s.	228
kentledge	224
knees for vessels	542
knife blades or blanks, rough	285
liquor, solution of acetate or nitrate of iron, for dyeing and calico printing	517
loops, etc	226
manufactures of, n. o. p.	321
not manufactured in Canada, for ships or vessels	542
masts for ships, or parts of	542
nails, cut	255
n. e. s.	256
nitrate of (iron liquor)	517
nut blanks	279
nuts	279

	Number of tariff item.
Iron, pieces, punchings, or clippings of plate, etc.	223
in pigs	224
pipe, cast	248
fittings for	254
plates for vessels	542
Canada	234
pieces, punchings, etc., of	223
30 inches wide and over and ¼ inch and over thick	231
sheared or unsheared	232
puddled bars	226
rails, crop ends of, etc	223
railway bars or rails, n. e. s	238
ribs for manufacture of umbrellas, parasols, and sunshades	572
rivets	279
rods, rolled, round, wire, for manufacture of wire	574
Swedish rolled, under ¼ inch in diameter	237
nail, Swedish rolled, under ½ inch in diameter, for manufacture of horseshoe nails	237
rolls, chilled	254
Russia	234
sand for polishing granite or glass	541
scrap, cast	224
old, etc., part of vessels wrecked in Canadian waters	581
wrought, having been in actual use, etc	223
screws, n. o. p	260
scroll, 8 inches or less wide, 18 gauge and thicker, n. e. s	229
thinner than 18 gauge, n. e. s	234
sections, rolled, less than 35 pounds per lineal yard, n. o. p	227
sections, n. e. s	228
shapes, rolled	227
less than 35 pounds per lineal yard	227
n. e. s. and n. o. p	228, 229
sheets, 17 gauge and thinner	234
flat, galvanized	234
sheared or unsheared	232
for vessels	542
coated, n. o. p	234
pieces, punchings, etc., of	223
skelp, sheared or rolled in grooves	232
for manufacture of steel pipe	233
shot, for glass or granite	541
slabs	226
spikes, cut	255
springs for railway or tramway vehicles, etc	246
stars, rolled, n. e. s	228
steam engines, n. e. s	315
stone ware	185
strip, 8 inches or less wide, 18 gauge and thicker, n. e. s	229
thinner than 18 gauge, n. e. s	234
sulphate of	502
tees, less than 35 pounds per lineal yard	227
Iron tees, n. e. s	228
terne plate	234
trough sections, n. e. s	228
tubes for manufacture of bedsteads	617
tubing, lacquered or brass covered, for manufacture of bedsteads	617
wrought, for mining, etc	555
over 2 inches in diameter, n. e. s	251
2 inches or less in diameter, n. e. s	252
other, n. o. p	253
ware, enameled, n. e. s	308
washers	279
wire, galvanized, 9, 12, and 13 gauge	603
cloth, wove wire, and wire netting	270
for manufacture of boots and shoes	627
twisted, for boots and shoes	627
work, structural	242
zees, n. e. s	228
Irons, sad, hatters' and tailors'	245
Isinglass	27
Istle	521
Italian cloth, to be finished in Canada, etc	386
Ivory black	547
nuts, unmanufactured	543
unmanufactured	543
vaccine points	515
veneers of	543
Ivories, piano key	543

J.

Jackets, water, blast furnace	555
Jacquards, to be dyed and finished in Canada, etc	286
Jalap root, unground	515
Jams, n. e. s	85
Japan driers, n. e. s	168
Japanned leather	215
Japans, n. e. s	168
Japonica, terra	517
Jars, glass	208
Jeans, imported by corset and dress-stay makers	364
Jellies, n. e. s	85
Jewelry	350
Jewels, cases for	351
Jigs, mining machinery	555
Joists, rolled iron or steel, n. e. s	228
Juice, lime, containing spirits	5
crude	550
n. o. p	6
Juices, fruit, containing spirits	5
n. o. p	6
June buds	73
Junk, old	544
Jute and jute butts	545
bags or sacks	377
canvas, not pressed, etc., by manufacturers of carpets, etc	546
carpets, mats, and matting	396
cloth as taken from the loom, not colored, etc	545

	Number of tariff item.
Jute cloth not otherwise finished than bleached or calendered	374
flax, and hemp combined, manufactures of	376
horse clothing, shaped	375
manufactures of, n. e. s	376
rags	570
surgical dressing	152
twine for harvest binders	433, 620
yarn, by manufacturers of carpets, rugs, mats, etc	546

K.

Kainite	520
Kangaroo leather, dressed, waxed, or glazed	212
Kartavert	341
Kaurie, gum	531
Kelp	521
Kentledge, iron	224
Kerosene oils, n. e. s	173
Keys, watch and clock	346
Kid leather, dressed, waxed, or glazed	212
Kiln-dried chicory	92
Kitchen knives	284
hollow ware, n. e. s	308
Knees, iron or steel, for vessels	542
Knife blades and blanks in the rough	285
polish, n. o. p	164
Knitted goods, n. e. s	388
Knives, hay or straw, and edging	290
steel for manufacture of	598
table, pocket, glaziers', etc	284
reaper and mower, steel for manufacture of	599
Knobs, steel for manufacture of	594
Kryolite, mineral	477

L.

Labels for fruits, confectionery, etc	127
Lac, crude, seed, button, stick, and shell	517
Lace collars and similar goods	362
nets	362
wire fasteners, shoe	553
Laces, n. o. p	362
boot, shoe, and stay	405
shoe and corset, tagging metal, for manufacture of	606
Lacquers	161
n. e. s	168
Ladies' blouses and shirt waists	366
Lag or coach screws, n. o. p	260
Lamb, fresh	16
leather, dressed, waxed, or glazed	212
Lambs' wool, surgical dressing	152
Lamp black	547
Lamp chimneys	208
shade blanks, celluloid	286
shears	284
springs	298
wicks	418
Lamps	279
miners' safety	555
Land sides, cut to shape but not molded, etc	317
Lanterns	297
magic, and slides therefor	422
Lap dusters	389
Lapping and blanketing, for cotton manufacturers, etc	486
Lard	18
compound and similar substances	18
oil	169
Lashes for whips	217
Last blocks, rough hewn or sawed only	611
Lastings for manufacture of buttons	548
Laths	611
Laundry soap	23
bluing	160
Lava, unmanufactured	502
tips	297
Lavender water, alcoholic	7 (c)
Lawn mowers	291
sprinklers	312
tennis nets	434
trees, shrubs, and plants	74
Lead, acetate of, not ground	515
bullets	274
dry, red and white	158
in bars and sheets	273
manufactures, n. o. p	275
nitrate of, not ground	515
old scrap, pig, and block	272
pencils	421
pipe	274
shot	274
tea	610
Leaf, Dutch or schlag metal	352
gold and silver and aluminium	352
palm, unmanufactured	562
tobacco, unstemmed	445
stemmed	446
Leather, belting	213
of	218
board	216
dressing	164
harness	212
heads for manufacture of whips	576
japanned	215
manufactures of, n. o. p	220
morocco	215
skins for	213
patent or enameled	215
scrap, tanners'	213
upper, including dongola, kid, lamb, etc., dressed	212
n. e. s., dressed, etc	212
n. o. p	213
Leathers, glove, for glove manufacturers	214
Leatheroid	216
Leaves, crude drugs, not edible, etc., n. o. p	515
Leeches	549
Leghorn hats, unfinished	497
Leicester combing wool	390
Lemon rinds, in brine	504
wine	8
Lemons	80
Lesson pictures, Sunday school	464
Letters for signs, etc	310

	Number of tariff item.
Libraries, books for	467
Lichens	515
Licorice paste	150
in rolls and sticks	150
root, unground	515
Life boats	472
saving apparatus	472
Light, electric carbons or carbon points	295
gas, or coal oil fixtures, or parts thereof	297
glass bulbs for	298
Lights, head and side	297
Lignite oils, illuminating, over 30 cents per gallon	170
Lignum-vitæ, lumber and timber, planks and boards of	611
sawdust	614
Lilies of the valley	526
Limbs, artificial	479
Lime, chloride of	502
juice, containing spirits	5
crude	550
n. o. p.	6
sulphate of (gypsum, crude)	502
Limes	80
Lincolnshire combing wools	390
Linen bags or sacks	377
clothing, n. o. p.	362
collars	365
cuffs	365
damask of	361
stair and diaper	361
fabrics, articles made from, n. o. p.	362
hose, lined with rubber	222
nettings	362
rags	570
Lines, fishing, not including sporting tackle, etc.	524
tape	422
Liniments, n. o. p.	147
Linings, carpet	396
stove	181
tips and sides, for hats	533
chimney	184
coat, to be finished in Canada, etc.	386
Link belting chain for binders	318
Links, coil chain	261
Linoleum	398
Linseed oil	169
Lint	152
Liquors of all kinds, n. e. s.	7 (*a*)
Lquid paints and fillers, n. e. s.	160
paint, gold	352
driers, n. e. s.	168
Liquor, iron, solution of acetate or nitrate of iron, for dyeing or calico printing	517
red, crude acetate of aluminium, etc.	517
Liquors, alcoholic or spirituous	7
n. o. p.	7 (*a*)
Lists, illustrated price	126
Literary papers, weekly, unbound	469
Litharge	502
Lithographed commercial blank forms	128
tickets, posters, etc.	127
Lithographic presses, etc.	313
stones, not engraved	190
Litmus	515
Live hogs	12
stock, settlers'	455
Living animals, n. e. s.	11
Loading tools	306
Locks, n. e. s.	280
steel for manufacture of	594
Locomotive wheel tires, steel, rough	551
Locomotives for railways, n. e. s.	241
running on lines crossing frontier, etc.	474
Locust bean meal	526
beans	526
Logs	611
Logwood, extract of	517
ground	517
Looking glass, German	207
Loops, iron or steel	226
Lotions, alcoholic, n. e. s.	7 (*b*)
Lozenges, n. o. p.	147
Lubricating oils, petroleum, costing less than 25 cents per gallon	171
n. e. s.	175
Lumber, creosoted, squared, or sided	611
hickory, sawn to shape for spokes	611
manufactured, n. e. s.	329
of amaranth, cocoboral, etc., rough	611
sawn or split, etc.	611
sawed, undressed, or dressed on one side only	611
Lumps, celluloid, xyolite, or xylonite, in the rough	501
Luster wools, etc.	390

M.

Macaroni	59
Mace	100
Machinery and boilers, composed wholly or in part of iron or steel, n. e. s.	315
Machine attachments, sewing	553
nailing, certain wire for use in connection with	627
card clothing	316
screws, n. o. p.	260
Machinery, mining, smelting, and reducing	555
Machines, bench, n. o. p.	289
fire extinguishing	311
Machinery, n. e. s.	315
folding and cutting	313
mowing	318
printing	313
ruling	313
sewing or parts	314
settlers'	455
smelting, mining, and reducing	555
slot	315
strength testing	283
typewriting	315
Mackerel	104
fishlines	524
net twine	524

	Number of tariff item.
Mackintosh clothing, certain cloths for manufacture of	381
Madder, ground or prepared, and extract of	517
Indian, ground or prepared, and extract of	517
Magazines, monthly, etc., unbound	469
Magic lanterns and slides therefor	422
Magnetic machinery for separating, etc., iron ores	555
Mahogany, lumber and timber, planks and boards of	611
sawdust	614
Malleable spocket chain for binders	318
Malt	68
extract of (nonalcoholic)	69
Mane combs	427
Manganese, oxide of	502
ferro	225
Mangold seed	526
Mangoes	526
Manicure files	284
Manila and sisal mixed, twine for harvest binders	433, 620
grass	521
hoods	497
plaits	563
twine for harvest binders	433, 620
Mantels, slate	198
Mantle-makers' fashion plates	469
Manufactured tobacco, n. e. s	444
Manure spreaders	318
Manures, animal or vegetable	520
Manuscripts	461
Maple sugar and sirup	439
Maps, n. e. s	130
insurance	461
for use of schools of blind	461
Marble, sawn only	194
n. e. s. and manufactures of	195
rough	193
Marline, barked	524
Masks, fencing	306
Mastic gum	531
Masts, iron or steel, for ships, or parts of	542
Mathematical instruments, n. e. s	422
Matrices for the stereotypes, etc., of almanacs, etc., n. e. s	302
of books, etc	604
newspaper columns	303
Mats of cocoa, straw, hemp, or jute	396
door or carriage, n. e. s	395
gutta-percha or rubber	222
Matting of cocoa, straw, hemp, or jute	396
cork	398
gutta-percha or rubber	222
Mattocks and eyes or poles for	289
Mattresses, hair, spring, and other	343
wire, steel wire for manufacture of	628
Meal, buckwheat	46
corn	47
cotton seed	559
Meal, damaged by water in transit	45
locust bean	526
oat	50
oil cake	559
palm nut	559
Meats, canned	15
extracts of	15
fresh, n. e. s	14
n. e. s	13
labels for	127
Mechanic arts, books on	464
Medals, collections of	473
won in competition	473
jubilee and dies therefor	473
Medicinal preparations, n. o. p	147
of petroleum, etc., (similar to vaseline)	178
roots	515
wines, alcoholic	7 (*b*)
not over 40 per cent spirits	7 (*f*)
Medicines, alcoholic, n. e. s	7 (*b*)
Meerschaum, crude or raw	552
Melado	436
concentrated	436
Memorial window glass	202
Menageries	458
Merchandise, carriages laden with	453
Mercury pumps	555
Mescal	7 (*a*)
Messenger pigeons	514
Metal, babbitt	299
britannia, manufactures of, not plated	292
in pigs, blocks, and bars	493
composition for manufacture of filled-gold watch cases	349
glove fasteners	553
leaf, Dutch or schlag	352
ores of	556
screws, n. o. p	260
tagging, by shoe and corset lace manufacturers	606
type	299
yellow	632
Metallic bismuth in its natural state	484
Metallurgy, books on	464
Metals, compound of bromine and potassium, for reducing	477
Meters, gas	282
Methyl alcohol	7 (*a*)
Methylated spirits	7 (*a*)
Mexican fiber	521
saddletrees	612
Military bands, Canadian, musical instruments for	450
clothing, by and for use of army and navy	449
for use of Canadian militia	450
stores, by and for use of army and navy	449
for use of Canadian militia	450
Militia, Canadian, certain articles for use of	450
Milk, condensed	33

	Number of tariff item.
Milk foods and similar preparations	34
Millboard	134
Millet seed	61
Milliners' fashion plates	469
Mill, universal, steel plates	230
Mills, for engraving copper rollers	486
fanning	315
stamp	315
wind	315
Mine, run of, coal	180
Mineral cryolite or kryolite	477
orange	158
potash, German	520
waters, natural, not in bottles	554
Minerals, diamond drills for prospecting for	513
Mineralogical specimens	463
Miners' safety lamps	555
Mining, books on	464
machinery	555
powder	412
Misses' blouses and shirt waists	366
Mitts of all kinds	402
Mixed acids	143
Models, casts as, for use of schools of design	498
for illustrating natural history	463
of inventions	475
Mohair cloth, for manufacture of buttons	548
plaits	563
yarns	508
Molasses, for manufacture of blacking	634
produced in manufacture of sugar, imported in original package, etc.	441
and imitations, n. o. p.	440
Monitors, hydraulic mining	555
Monthly magazines, unbound	469
Morocco leather	215
skins for, tanned only	213
Morsels, net, of cotton, etc.	524
Mosaic flooring	200
Moss, crude, natural or cleaned only	521
Iceland, crude, natural or cleaned only	521
Mother-of-pearl shells, unmanufactured	527
Motors, electric	294
Mold boards, cut to shape but not molded, etc.	317
Molded celluloid balls or cylinders, not finished	286
glass tableware	208
Moldings of wood	332
Molds, gold beaters'	530
ingot	541
Mounts for manufacture of umbrellas, parasols and sunshades	572
pipe	423
Movements, clock	346
watch	347
Mowers, lawn	291
Mower knives, steel for manufacture of	590
Mowing machines	318
Mucilage	27
Muffs, fur	407
Mule shoes	256
Mullet net twine	524
Munitions of war by and for army and navy	449
for Canadian militia	450
Munjeet, ground or prepared, and extracts of	517
Muriatic and nitric acid	143
Muriate of potash, crude	565
Mushroom spawn	526
Music, printed	129
Musical instrument cases	424
instruments for bands, by and for army and navy	449
Canadian militia	450
schools of the blind	460
settlers'	455
n. o. p.	356
Musk, in pods or in grain	515
Musket powder	413
Muskets	306
Mustard cake	63
ground	62
seed	526
Mutton, fresh	16

N.

Nail rods, Swedish, rolled iron or steel for manufacture of horseshoe nails	237
Nails, brass	276
composition	258
copper	276
cut, of iron or steel	255
sheathing	258
shoe	259
wire, n. o. p.	257
wrought and pressed	256
n. e. s.	256
Naphtha, wood	7 (a)
n. e. s.	173
Napkins, damask, of linen	361
Natural mineral waters, not in bottles	554
Natural Mexican fiber	521
Navy, articles by and for use of	449
Neat's-foot oil	169
Needles	271
surgical	153, 605
Net, morsels of cotton, etc.	524
Nets, fish, and twine for	524
sportsmen's	434
lace	362
lawn tennis	434
Netting, wire, of iron or steel	270
Nettings of cotton, silk, linen, or other material	362
Nevada silver, manufactures of, not plated	292
Newspapers, partly printed	313
unbound	469
Newspaper columns, stereotypes, etc., of	604
Nibs, cocoa	93
Nickel	556
anodes	278
caps for whip ends	576
plated ware	293
hollow ware	308

	Number of tariff item.
Nickel silver, manufactures of, not plated	292
ingots, etc	584
Niter, cubic	586
sweet spirits of	7 (*d*)
Nitrate of ammonia	477
iron (iron liquor)	517
lead, not ground	515
soda	586
Nitric and muriatic acid	143
Nitrite of soda	586
Nitro and other explosives	414
Nitroglycerin	414
Nitrous ether	7 (*d*)
Noils	629
Nonelastic webbing	400
Notches, for manufacture of umbrellas, parasols, and sunshades	572
Notes, bank, unsigned	128
promissory, unsigned	128
Novels, etc., unbound or paper bound, etc	124
Nun's cloth, to be dyed and finished in Canada, etc	386
Nut, cocoa, desiccated	99
Nutgalls	517
Nutmegs	100
Nuts, viz, almonds, walnuts, Brazil, pecans, and shelled peanuts, n. e. s	96
of all kinds, n. o. p	96
shelled, n. e. s	95
acorn, n. o. p	89
cocoa, n. e. s	97
imported direct by vessel	98
crude drugs, not edible, etc., n. o. p	515
ivory, unmanufactured	543
tubular, iron or steel for manufacture of	538
iron or steel	279
Nut blanks, iron or steel	279
Nux vomica beans, crude only	526

O.

Oak bark	517
ground	517
extract of	517
extract of	517
lumber and timber, planks and boards of	611
sawdust	614
Oakum	557
surgical dressing	152
Oar blocks, rough hewn or sawed only	611
Oatmeal	50
Oats	49
Ochers	159
Ochrey earths	159
Odors, French or flower, preserved in oils, etc	148
Offal, fish	520
Office furniture	343
knives	284
Oiled silk and cloth, n. o. p	385
Oil, aniline, crude	477
cake and oil-cake meal	559
carbolic or heavy	558
cloth, floor, etc., enameled	398
Oil, coal and kerosene, n. e. s	173
coal, fixtures or parts	297
cocoanut, natural	558
cod liver	154
essential	177
finish, n. e. s	168
fuel and gas, by manufacturers for fuel purposes, etc	172
fusel	7 (*a*)
hair, nonalcoholic	149
illuminating, petroleum, coal, shale, or lignite, costing more than 30 cents per gallon	170
lard	169
linseed or flaxseed	169
lubricating, less than 25 cents per gallon	171
n. e. s	175
medicinal, etc., n. o. p	147
neat's-foot	169
olive, n. e. s	176
for manufacturing soap or tobacco or for canning fish	558
paintings by artists of well-known merit, Canadian artists	470
palm, natural	558
petroleum, for fuel purposes, etc	172
potato	7 (*a*)
of roses	558
resin	480
sesame seed	169
spermaceti, whale, and other fish oils, n. o. p	122
Ointments, n. o. p	147
Old brass	492
copper	492
junk	544
lead	272
scrap iron and steel recovered from vessels wrecked in Canadian waters	581
Oleographs, advertising	126
n. e. s	130
Oleomargarine, prohibited	639
Oleostearin	561
Olive oil, n. e. s	176
for manufacturing soap or tobacco or for canning fish	558
Opium, crude	155
powdered	156
prepared for smoking	157
Optical instruments, n. e. s	422
Orange mineral	158
rinds in brine	504
wine	8
Oranges	80
Ore crushers	315
of cobalt	502
drying machinery	555
roasting machinery	555
samplers, automatic	555
Ores of metal of all kinds	556
Organs	356
parts of	357
Orleans, to be dyed and finished in Canada, etc	386

	Number of tariff item.
Ornamental trees, shrubs, and plants	74
Ornaments of alabaster, spar, amber, etc	351
bead, n. e. s	351
Orris root, unground	515
Osiers, unmanufactured	499
Ottar of roses	558
Ovals, rolled iron or steel	229
Overcoatings, wool, worsted, hair of alpaca, etc., n. e. s	394
Ox shoes	256
Oxalic acid	477
Oxide of ethyl, hydrated	7 (*a*)
manganese	502
copper, cobalt, and tin	502
black, for manufacture of chlorate	515
Oxides, n. e. s	160
Oyster knives	284
Oysters, canned, in cans not over 1 pint	117
over 1 pint but not over 1 quart	118
exceeding 1 quart	119
in the shell	120
packages containing, n. o. p	121
preserved or prepared, n. o. p	115
seed and breeding	560
shelled, in bulk	116

P.

Packages, Canadian, exported and returned	635
containing oysters and other fish, n. o. p	121
Packing, rubber or gutta-percha	222
Pads, hair brush	491
paper, not printed	140
stair	396
Pails	330
Paint, gold liquid	352
Paints, anticorrosive and antifouling	160
ground in spirits	161
n. e. s	160
Paintings, copies of the old masters, by artists of well-known merit	470
oil or water colors, by artists of well-known merit	470
oil or water colors by Canadian artists	470
prohibited	636
n. e. s	130
Palette knives	284
Palings	611
Palm leaf, unmanufactured	562
nut cake and meal	559
oil, natural	558
spirit	7 (*a*)
Palms	526
Pamphlets, advertising	126
n. e. s	125
Pans, platinum, for manufacturers of sulphuric acid, etc	564
Pantaloon buttons	426
Paper, album insides	461
borders	138
boxed	140
cutting machines	313
envelopes	140
hangings or wall	138
hemp, for manufacture of shot shells	535
manufactures of	140
pads	140
printing	139
ruled, bordered, and coated	140
sacks and bags of all kinds	136
sand, glass, flint, and emery	135
shells, brass cups for manufacture of	512
tarred	135
union collar cloth, glossed or finished	133
not glossed or finished	132
waste clippings	570
of all kinds, n. e. s	139
Papers, albumenized, etc., for photographers	123
news, partly printed	131
weekly, literary, unbound	469
window blinds	138
Papeteries	140
Papier-maché shoe buttons	553
ware, n. o. p	140
Paraffin wax	151
candles	22
Parasol or sunshade sticks, bamboo reeds for	499
sticks or handles, n. e. s	337
of bamboo, not manufactured	499
Parasols	491
articles for the manufacture of	572
Paris green, dry	162
plaster of, ground, not calcined	188
calcined or manufactured	189
Paris white	624
Parrot cages	287
Passenger cars, railway, running on lines crossing frontier, etc	474
Paste, chocolate	94
cocoa	94
indigo	517
licorice	150
Pastes, nonalcoholic	149
n. o. p	147
Patent leather	215
prepared dyes	517
preparations, n. o. p	147
Patterns	320
Paving brick	181
blocks of stone	194
Peaches, n. o. p	81
Peach trees	73
seedling stock for grafting	526
Peanuts, shelled, n. e. s	96
Pear trees	73
seedling stock for grafting	526
Pearl ashes, in packages of not less than 25 pounds	565
Pearline	26
Pease, n. e. s	38
seed from Great Britain	526
Pecans	96
Pedometers	422
Peel, candied	438

	Number of tariff item.
Pelts, raw	536
Pencils, lead	421
slate	199
Penknives	284
Pens and penholders	421
Percussion caps	306
coal cutters	315
Perfumes, preparations, n. o. p	149
spirits	7 (c)
Perfumery, nonalcoholic	149
Perfumes, alcoholic	7 (c)
Periodicals, illustrated, advertising	126
n. e. s	125
Peroxides of hydrogen, solutions	146
Persimmon wood	611
sawdust	614
Persis	517
Personal effects of British subjects dying abroad	454
left by bequest	454
Pessaries	152
Petroleum, barrels containing	174
crude, imported by manufacturers for fuel purposes, etc	172
illuminating oils, costing over 30 cents per gallon	170
lubricating oils, less than 25 cents per gallon	171
oils, n. e. s	173
preparations of, similar to vaseline	178
Pharmaceutical preparations, n. o. p	147
Pheasants	514
Phials	208
Philosophical instruments, n. e. s	422
and apparatus, not manufactured in Canada, etc	462
Phosphate, acid, n. o. p	145
rock	520
Phosphor bronze and phosphor tin, in blocks, bars, sheets, and wire	299
Phosphorus	502
Photograph frames	336
Photographic dry plates	419
instruments, n. e. s	422
Photographers' paper, chemically prepared	123
Photographs prohibited	636
sent by friends	471
n. e. s	130
Pianofortes	356
parts of	357
Piano key ivories	543
Pickets	611
Pickled fish, other, in barrels	108
not in barrels or half barrels, n. o. p	109
herrings	105
salmon	107
Pickles	67
Picks and eyes or polls for	289
Pictorial illustrations of insects, for colleges, etc	461
Pictorial show cards	126
Picture frames	336
wire	269
Pictures, left by bequest	454
Sunday school lesson	464
n. e. s	130
Pigeons, homing or messenger	514
Pigs, britannia metal in	493
copper in	492
iron in	224
lead in	272
tin in	610
zinc in	633
Pillows	343
Pills, n. o. p	147
Pineapples	526
Pine clapboards	611
pitch, in packages not less than 15 gallons each	507
tar in packages not less than 15 gallons each	507
Pins, hat and hair, jewelry	350
wire, n. o. p	271
Pipe, cast iron	248
clay	505
lead	274
mounts	423
platinum, for manufacture of sulphuric acid	564
iron or steel, fittings of	254
Pipes, drain	184
sewer	184
tobacco	423
iron or steel, other, n. o. p	253
Pistol cases or covers	306
Pistols	306
Pitch, bone, crude	480
burgundy	477
coal	507
pine	507
lumber and timber, planks and boards of	611
sawdust	614
Plain strip fencing, wire, etc., for manufacture of	602
Plains, to be dyed and finished in Canada, etc	386
Plaits, chip, manila, cotton, mohair, straw, Tuscan, and grass	563
Planking, ship	611
Planks, sawed, undressed, or dressed on one side only, etc	611
planed, jointed, etc	328
of certain lumber, rough, sawn, or split, etc	611
Plans, building, n. e. s	130
Plantains	526
Plants, fruit, n. e. s	74
shade, lawn, and ornamental	74
Plaster of paris, calcined or manufactured	189
ground, not calcined	188
Plasters, n. o. p	147
Plate, pieces, punchings, or clippings of, etc	223

	Number of tariff item.
Plate, bridge, rolled iron or steel, not less than 30 inches wide, etc	231
communion	509
family, left by bequest	454
glass, rough rolled	202
not beveled, not over 25 square feet	203
n. e. s	204
beveled, n. o. p	205
bent	209
German looking	207
universal mill, or rolled edge steel	230
rolled iron or steel, sheared or unsheared	232
Plated cutlery	284
ware, nickel and electro	293
cases for, fancy	351
Plates, for agricultural implements, not molded, etc	317
aluminium	476
brass and copper	492
Canada	234
China, goat, etc	578
copper	492
mining	555
dry, photographic	419
engraved on wood, steel, etc	301
fashion, tailors' and mantle makers'..	469
gold and silver bullion	495
nickel and german silver in	584
stove	245
iron or steel, 30 inches and over wide, etc	231
for vessels	542
phosphor bronze	299
plow, etc., cut to shape, but not molded, etc	317
platinum	564
railway fish	239
steel, more than 2½ cents per pound..	236
terne	234
tie, railway	239
tin	610
zinc	633
Platinum, for manufacture of chlorate	515
retorts, pans, condensers, etc., by manufacturers of sulphuric acid..	564
bars, strips, sheets, or plates	564
wire	564
Playing cards	137
Pleasure carts, n. e. s	323
Plow plates, cut to shape, but not molded, etc	317
Plows	318
Plumbago crucibles	510
manufactures of, n. e. s	355
unmanufactured	354
Plum trees	73
seedling stock for grafting	526
Plums	76
Plush fabrics, n. e s	368
hatters', of silk or cotton	533
Pocketbooks	424
Pocketknives	284
Pods, musk in	515
Points, carbon, n. e. s	295
ivory, vaccine	515
Poles, cornice	343
hop	611
Polish, knife and other	164
Pollock fish lines	524
Polls for picks and mattocks	289
Pomades, preserved in fat, etc	148
Pomatums, nonalcoholic	149
Pomegranates	526
Pop corn	438
Porcelain ware	185
Portable machines or parts	315
engines	315
Porter, in bottles	2
casks, etc	1
Portland cement	187
Portmanteaus	424
Postage stamps, collections of	473
Posters	126
Post-hole diggers	290
Posts, fence	611
rough hewn or sawed only	611
Pot ashes, in packages not less than 25 pounds	565
Potash, bichromate of, crude	565
caustic	565
chlorate of, ground, etc	515
German mineral	520
muriate of, crude	565
prussiate of, red and yellow	565
salts, German	520
Potassium, cyanide of	477
Potato diggers	315
spirit or oil	7 (*a*)
Potatoes, n. e. s	39
sweet	64
Pouches, tobacco	423
Poultry, canned	15
n. o. p	17
Pounders	330
Powder, blasting and mining	412
canister	413
cannon, musket, rifle, gun, and sporting	413
giant	414
Powdered opium	156
rubber	573
Powders, baking	72
brocade and bronze	352
soap	26
tooth and other, nonalcoholic	149
n. o. p	147
Prayer books	464
Precious stones in the rough	525
and imitations, polished, not set, etc., n. e. s	348
Precipitate of copper, crude	502
Preparations, anatomical	463
medicinal, chemical, and pharmaceutical, n. o. p	147
of petroleum, similar to vaseline	178

	Number of tariff item.
Preparations, patent and proprietary, n. o. p.	147
perfumed, n. o. p.	149
toilet, alcoholic	7 (c)
nonalcoholic	149
Prepared opium (for smoking)	157
Preserved ginger	84
Preserves, n. e. s.	85
Pressed felt, not filled, etc., by any woven fabric	378
glass tableware	208
nails and spikes	256
Presses, lithographic	313
printing	313
Price books and lists, illustrated	126
Primers	306
for manufacture of shot shells and cartridges	535
Printed blank forms, commercial	128
books, n. e. s.	125
cotton fabrics, n. o. p.	360
matter, n. e. s.	128
music	129
paper, prohibited	636
advertising bills, etc.	126
Printing machines	313
paper	139
presses	313
type for	300
Prints, prohibited	636
n. e. s.	130
Prison labor, goods produced by, prohibited	641
Prizes won in competitions	473
Prohibited books, papers, paintings, etc.	636
coins	638
copyright works	637
goods made in prisons	641
oleomargarine, butterin, etc.	639
tea, adulterated	640
Promissory notes, unsigned	128
Pronged forks	290
Proprietary preparations, n. o. p.	147
Prunella	566
Prunes	77
Pruning knives	284
Prussiate of potash, red and yellow	565
Psalm books	464
Puddled bars, iron or steel	226
Pulp of grass	521
ultramarine blue	621
wood	333
Pulque	7 (a)
Pumice and pumice stone	567
Pumpings, sugar, drained in transit	436
Pumps, brass	312
mercury	555
n. e. s.	315
Punchings, iron or steel	223
Pure-bred domestic fowls	514
Purses	424
fasteners, frames, and clasps for	425
Putty	165
dry, for polishing glass or granite	541
knives	284
Pyroligneous acid, n. e. s.	141
Pyroligenous acid, crude, not over 30 per cent	142
Pyrometers	555
Pyroxylic spirit	7 (a)

Q.

Quails	514
Quarterly magazines, unbound	469
Quartz, crystallized	556
Quebracho, extract of	517
Quicksilver	568
Quills, natural or unplumed	569
Quilts, linen or cotton, n. o. p.	361
Quince trees	73
Quinces	76
Quinine, salts of	477
Quoins for printing	300

R.

Racks, cue	340
Rags of cotton, linen, hemp, jute, and wool	570
Railroad spikes	255
tickets	127
ties	611
Railway bars or rails, iron or steel, n. e. s.	238
cars	324
running on lines crossing frontier	474
fish plates	239
freight rates	124
rugs	389
scrapers	324
Railways, locomotives for, n. e. s.	241
switches, frogs, crossings, and intersections for	240
Rails, iron or steel, crops from, etc.	223
railway, n. e. s.	238
steel, not less than 45 pounds per lineal yard, etc.	585
Raisins	77
Rakes, horse	318
n. e. s.	290
Ramie cloth, for mackintosh clothing	381
Rape seed	526
Raspberry bushes	74
wine	8
Raspberries, wild	526
n. e. s.	75
Rasps	288
Rat cages	287
Rattan, split or manufactured, n. o. p.	326
Rattans, unmanufactured	499
Raw chicory	91
cotton	508
hide centers for whips	576
manufactures of, n. o. p.	220
hides, dry, salted, or pickled	536
meerschaum	552
pelts	536
rennet	571
siennas	159
skins	536
silk	582
tobacco leaf, unstemmed	445

	Number of tariff item.
Raw tobacco leaf, stemmed	446
turpentine	618
Razors	284
Ready-made clothing, wool, etc., n. o. p.	394
Reapers	318
Reaper knives, steel for manufacture of	590
Reaping hooks	290
steel for manufacture of	598
Recognition buttons	426
Recovered rubber	573
Red cedar, lumber and timber, planks and boards of	611
sawdust	614
lead, dry	158
liquor, a crude acetate of aluminium, etc.	517
prussiate of potash	565
wood, lumber and timber, planks and boards of	611
sawdust	614
Reducing machinery	555
Reeds, bamboo, for umbrellas, etc	499
for whips, square	576
split or otherwise manufactured, n. o. p.	326
Refined sugars	435
Refuse, fish	520
Regalia	362
Registers, cash	343
Regulus of antimony	478
Religious tracts	464
Rennet, raw or prepared	571
Reports, annual, of religious or benevolent associations	466
Reprints of copyright works copyrighted in Canada, prohibited	637
Resin, in packages not less than 100 pounds	480
Resins, gum, crude drugs, not edible, etc., n. o. p.	515
Reticules	424
frames, clasps, and fasteners for	425
Retorts, mining	555
platinum	564
Revolvers	306
Rhizomes	526
Rhubarb root, unground	515
Ribbons of all kinds	369
Ribs of brass, etc., for manufacture of umbrellas, etc	572
Rice, cleaned	52
flour	53
for making starch	54
uncleaned, unhulled, or paddy	51
Rifle powder	413
Rifles	306
Rigging, wire, for ships and vessels	626
Rinds, citron, orange, and lemon, in brine	504
Rings for manufacture of umbrellas, etc	572
Rivets, brass	276
copper	276
iron or steel	279
tubular, hoop iron for manufacture of	538
Road scrapers	324
rollers	290
Roasted chicory	92
coffee, not imported direct	88
and imitations of, etc	89
Roasting machinery, ore	555
Rock crushers and drills	315
phosphate	520
emery grinding machines	555
Rockingham ware	185
Rods, brass	492
copper	492
fishing	335
iron or steel for manufacture of wire	574
Swedish rolled iron, under ½ inch in diameter	237
Swedish rolled steel, under ½ inch in diameter, etc., for manufacture of horseshoe nails	237
Rolls, brimstone in	502
sulphur in	502
Rolled edge steel plate, not less than 30 inches wide, etc	231
bridge plates, universal mill	230
german silver	694
iron tubes for manufacture of bedsteads	617
nail rods, Swedish, for manufacture of horseshoe nails	237
or steel angles, channels, etc., less than 35 pounds per yard	227
channels, etc., n. e. s.	228
bars	229
beams, joists, etc., n. e. s.	228
shapes, n. o. p.	229
sheets or plates, sheared, etc	232
17 gauge and thinner	234
hoop, band, scroll, or strip, thinner than 18 gauge, n. e. s.	234
rods, Swedish, under ½ inch in diameter, etc	237
round wire rods for manufacture of wire	574
steel tubes, not more than 1½ inches in diameter	250
Roller skates	281
Rollers, copper, for use in calico printing	577
road or field	290
window shade	344
Rolls, chilled iron or steel	254
cornish and belted	315
Rolling pins	330
Roofing slate	197
Roots, orris	515
medicinal	515
crude drugs, not edible, etc., n. o. p.	515
Rope wire	269
Ropes, head	524
Rosebushes	74
Roses, attar of, or ottar of	558
oil of	558

	Number of tariff item.
Rosewood, lumber and timber, planks and boards of	611
sawdust	614
Rosin oil	480
in packages of not less than 100 pounds.	480
Rotary coal drills	555
Rough burr stones, in blocks	496
grease, refuse of animal fat, for manufacture of soap and oil	528
marble	193
stuff, n. e. s.	160
Round, unmanufactured timber	611
Rounds, bar iron or steel, rolled	229
Rove, for manufacture of binder twine	432
Rubber hose, packing, mats, and matting	222
boots, stockinettes for	383
cotton or linen hose lined with	222
crude	573
fillets for card clothing	523
hard, in sheets	573
heads for whips	576
india, boots and shoes	221
clothing, etc.	222
manufactures of, n. o. p.	221
powdered	573
recovered	573
sheets	573
substitute	573
thread, elastic	575
waste	573
Rubberized oilcloth	385
Rugs, railway or traveling	389
cocoa, straw, hemp, or jute	396
Chinese goat, etc., not dyed	578
n. e. s.	397
Ruled paper	140
Rulers	421
Ruling machines	313
Rum	7 (*a*)
bay	7 (*c*)
shrub	7 (*a*)
Run of mine coal	180
Runners for manufacture of umbrellas, etc	572
Russia iron	234
Russian hair skins	578
Rye	40
flour	41

S.

Sacks of hemp, linen, or jute	377
paper	136
Sadirons	245
Saddletrees, Mexican	612
Saddlers' hardware	280
Saddlery, n. e. s.	280
Safes, amalgam	555
and doors of	283
Safety lamps, miners'	555
Safflower and extract of	502
Saffron and extract of	502
cake	502
Sago	53
flour	53
Sailboats, open, pleasure	410
Sail twine of hemp or flax and canvas, for boats' or ships' sails	411
Sails for boats and ships	380
Sal ammoniac	477
soda	586
Salmon, fresh	106
net twine	524
pickled or salted	107
prepared, etc., n. e. s.	115
Salt cake	586
coarse, n. e. s.	102
fine, in bulk, n. e. s.	102
from United Kingdom, etc.	579
for use of fisheries	579
n. e. s., packages containing	103
in bags, barrels, etc.	103
Saltpeter	477
Salted fish, all other, in barrels	108
not in barrels or half barrels	109
herrings	105
salmon	107
Salts, aniline	477
antimony	478
German potash	520
of quinine	477
zinc	502
Salves, n. o. p.	147
Samplers, ore, automatic	555
Sandarac gum	531
Sand	505
iron, for polishing granite or glass	541
paper	135
Sandstone, not hammered or chiseled	193
Sandalwood, lumber and timber, planks and boards of	611
sawdust	614
Sappato gum, crude	515
Sardines in tin boxes	111
any other form	112
Sarsaparilla root, unground	515
Satchels	424
Sateens for corset and dress-stay makers	364
Satin, white	624
wood, lumber and timber, planks and boards of	611
sawdust	614
Sauces	67
Sausage skins or casings, not cleaned	580
Sawdust of certain woods	614
Sawed boards, planks, etc., undressed, or dressed on one side only, etc	611
and deals, planed, etc	328
timber	611
Saws, steel for, cut to shape only	580
of all kinds	289
Scales	283
Schiedam	7 (*a*)
Schlag metal leaf	352
Schnapps	7 (*a*)
Scissors	284
School writing slates	199
Schools of blind, articles for	460, 461

	Number of tariff item.
Scrap brass	492
copper	492
iron, cast	224
or steel from vessels wrecked in Canadian waters	581
wrought, waste	223
lead	272
leather, tanners'	213
Scrapers, road or railway	324
Screens, wire	343
Screws, commonly called wood screws	260
metal, n. o. p.	260
Scroll, iron or steel, 8 inches and less wide, 18 gauge and thicker, n. e. s.	229
thinner than 18 gauge, n. e. s.	234
steel, more than 2½ cents per pound, n. o. p.	236
Scythes	290
steel for manufacture of	598
Seal net twine	524
Seamless bags, cotton	377
drawn tubing, zinc	633
tubes of rolled steel, not over 1½ inches in diameter	250
steel, for bicycles	250
Sea grass, crude, natural or cleaned only	521
weed, crude, natural or cleaned only	521
Sections, iron or steel, further manufactured than rolled	242
rolled iron or steel, less than 35 pounds per lineal yard.	227
n. e. s.	228
structural building and bridge iron or steel, n. e. s.	228
trough, iron or steel, n. e. s.	228
Seed cake, cotton	559
drills	318
lac	517
meal, cotton	559
pease and beans from Great Britain	526
oysters	560
rape, sowing	526
Seeding stock for grafting	526
Seeds, viz, annotto, beet, carrot, flax, turnip, mangold, and mustard	526
aromatic, viz, anise, anise star, caraway, coriander, cardamom, cumin, fennel, and fenugreek, crude, not edible, etc	526
stem, and fruits, crude drugs, not edible, etc., n. o. p.	515
n. o. p.	61
sunflower, canary, hemp, and millet	61
Seines, fish, and twine for	524
Self-binding harvesters	318
Semimonthly magazines, unbound	469
Senate, articles imported by and for use of	450
Senegal gum	531
Separators, cream, and steel bowls for	588
and parts	315
mining machinery	555
Serges, to be dyed and finished in Canada, etc.	386
Serum for subcutaneous injection	515
Sesame seed oil	169
Sets, smokers', and cases for	423
Settlers' effects	455
Sewer pipes	184
Sewing machine attachments	553
machines or parts	314
domestic, settlers'	455
silk	373
thread, cotton, in hanks	370
on spools, etc	371
Shackles, chain	261
Shaddocks	526
Shade blanks, lamp, celluloid	286
rollers, window	344
trees, shrubs, and plants	74
Shades and shade holders	297
glass	208
window, n. e. s.	399
Shafting, steel, turned, etc	243
Shale oils, illuminating, over 30 cents per gallon	170
Shams	362
Shanks, shoe, steel for manufacture of	591
Shapes, hat, cap, and bonnet	403
and bonnet, buckram for manufacture of	494
of iron or steel, rolled, less than 35 pounds per lineal yard	227
rolled n. e. s. and n. o. p. 228,	229
further manufactured than rolled, etc	242
hammered, n. o. p.	243
Shares, plow, cut to shape, etc	317
Shawls of all kinds	389
Shears	284
Sheathing nails	258
yellow metal for	632
vessels, felt, adhesive for	519
Sheep for the improvement of stock	457
leather, dressed, waxed, etc	212
Sheet aluminium	476
brass	492
celluloid, xylonite, or xyolite	501
copper, not coated or planished	492
glass	209
hard rubber, not further manufactured.	573
iron or steel for vessels	542
manufactures of, n. o. p.	309
30 inches wide and ¼ inch and over thick	231
No. 17 gauge and thinner, n. o. p.	234
flat, galvanized	234
coated, n. o. p.	234
steel, more than 2½ cents per pound, n. o. p.	236
music, printed	129
steel, crucible, for manufacture of mower and paper knives	590

	Number of tariff item.
Sheet wadding	358
Sheets of german silver	584
gold and silver bullion	495
iron or steel, No. 17 gauge and thinner, n. o. p.	234
lead	273
linen or cotton, n. o. p.	361
nickel silver	584
phosphor bronze	299
platinum	564
rolled iron or steel, sheared or unsheared	232
rubber in	573
silver, nickel, and german	584
tin	610
zinc in	633
Shelf oilcloth, enameled	398
Shell, lac in	517
Shellac gum	531
white, in gum or flakes, for manufacturing purposes	531
Shelled nuts, n. e. s.	95
oysters, in bulk	116
peanuts	96
Shells, cocoa	93
copper, for electrotypes, etc., of books, etc.	604
for stereotypes, etc., of almanacs, etc.	302
for stereotypes, etc., of newspaper columns	303
paper, brass cups for	512
shot, primers and hemp paper for	535
unmanufactured	527
Shingle bolts	611
Shingles	611
Ship building, books on	464
planking	611
timber	611
Shipping tags	127
Ships, chronometers and compasses for	503
foreign, applying for Canadian register	409
sails for	380
wire rigging for	626
Shirts and shirt waists	366
Shoemakers' ink	164
Shoe blacking	164
buttons, papier-maché	553
n. e. s.	426
dressing	164
knives	284
eyelets, hooks, and fasteners	553
laces	405
tagging metal for manufacture of	606
nails	259
shanks, steel for manufacture of	591
tacks	259
makers' tools	289
Shoes, horse, mule, and ox	256
india rubber	221
iron or steel wire used in manufacture of	627
rubber, stockinettes for	383
Shoes, wire of brass, iron, steel, and zinc, twisted, for the manufacture of	627
n. e. s.	219
Shot, iron, for polishing glass or granite	541
lead	274
shells, hemp paper for manufacture of	535
primers for	535
Shovel blanks, and iron or steel cut to shape for	291
handles, "D," wood	612
Shovels	291
Show cards, pictorial	126
cases	339
Shrub, rum	7 (a)
Shrubs, shade, lawn, and ornamental	74
Sickles	290
Side lights	297
Sided timber	611
Sides and tips, hatters', and linings for	533
Siennas, burnt, n. e. s.	160
raw	159
Signs	310
Silex	556
Silicate of soda	586
Silicon, ferro	225
Silk cloth, for manufacture of mackintosh clothing	381
clothing, n. o. p.	362
cocoons	582
embroidery	373
fabrics	368
hatters' plush	533
in the gum or spun, not more advanced than singles, etc.	372
for underwear	583
manufactures, n. e. s.	369
nettings	362
oiled, india rubbered, flocked, etc.	385
raw or as reeled from cocoon	582
sewing	373
twist	373
velvets	368
waste	582
Silver bullion, in blocks, bars, ingots, etc.	495
coin, except United States silver coin.	473
German, Nevada, and nickel, manufactures of, not plated	292
ingots, etc.	584
leaf	352
manufactures, n. e. s.	350
medals won in competition, etc.	473
nickel ingots, etc.	584
prunes	77
sweepings	495
ware, sterling or other	293
cases for, fancy	351
Silvered glass	206
Sinkers	319
Sirup, corn	437
glucose	437
maple	439
Sirups containing admixture of glucose or corn	437
fruit, n. o. p.	6

	Number of tariff item.
Sirups, medicinal, n. o. p.	147
n. o. p., product of sugar cane, etc.	440
Sisal and manila twine mixed, for binders.	433, 620
twine for binders	433, 620
Sizing cream	167
enamel	167
Skates	281
steel for manufacture of	593
Skeins, cart or wagon	247
Skeletons or parts thereof	463
Skelp iron or steel, sheared, etc., n. e. s.	232
for manufacture of steel pipe	233
Skiffs	410
Skin washes, alcoholic	7 (c)
Skins, Russian hair	578
chamois	212
for taxidermic purposes, viz, birds and animals	463
fish	463
fur, wholly or partially dressed	406
not dressed in any manner	529
for morocco leather, tanned only	213
gold beaters'	530
raw, whether dry, salted, or pickled	536
sausage, not cleaned	580
n. o. p.	213
Slabs, iron or steel	226
Slack coal, bituminous	179
Slag, blast furnace	485
Slate pencils	199
mantels	198
manufactures of, n. e. s.	198
roofing	197
Slates, school, writing	199
Sledges	289
Sleds, children s	323
Sleighs	322
Slides, magic lantern	422
Slippers, n. e. s.	219
Slime tables, mining	555
Slot machines	315
Slugs for printing	300
Smelting machinery	555
Smoked fish	110
Smokers' sets, etc., cases for	432
Smoothing irons	245
Snaths	290
Snuff	444
Soap, castile, mottled or white	24
common or laundry, not perfumed	23
harness	164
powders	26
rough grease, refuse of animal fat, for manufacture of	528
n. e. s.	25
Sockets, electric	294
tubular bow, steel for manufacture of	596
Socks of all kinds	387
Soda, arseniate of	586
ash	586
bichromate of	586
binarseniate of	586
bisulphite of	586
caustic	586
chlorate of	586
chloride of	586
nitrate of	586
nitrite of	586
sal	586
silicate of	586
stannate of	586
sulphate of, crude	586
Sodium, sulphide of	586
Sole leather	213
Solutions of peroxides of hydrogen	146
Soups	15
Southdown combing wools	390
Sowing rape seed	526
Soy	67
Spade blanks and iron or steel cut to shape for	291
Spades	291
Spanish grass	521
cedar, lumber and timber, planks and boards of	611
sawdust	614
Spar ornaments	351
Sparkling wines	9
Spatulas	284
Spawn, mushroom	526
Specimens, botanical	463
entomological	463
mineralogical	463
for illustrating natural history	463
Spectacle frames, parts of	211
Spectacles	210
Spelter, zinc	633
Spermaceti oil	122
Spices, n. e. s.	101
Spiegeleisen	225
Spikes, composition	258
cut, of iron or steel	255
railroad	255
wrought and pressed	256
Spiræa	526
Spiral railway springs, steel for	601
Spirit, palm	7 (a)
potato	7 (a)
pyroxylic	7 (d)
varnishes	161
wood	7 (a)
Spirits of ammonia, aromatic	7 (d)
fruits preserved in	83
lime juice and fruit juices fortified with	5
methylated	7 (a)
of niter, sweet	7 (d)
turpentine	166
wine	7 (a)
paints and colors ground in	161
perfumed	7 (c)
Spirituous or alcoholic liquors	7
fruit essences, n. e. s.	7 (b)
liquors, n. o. p.	7 (a)
Spokes, hickory, rough turned only	611
lumber sawn in shape for	611

	Number of tariff item.
Sporting powder	413
Sportsmen's knives	284
fish nets	434
Spreaders, manure	318
Sprigs, cut	259
Spring mattresses	343
steel, flat, for vehicle springs	600
spiral, for spiral railway springs	601
Springs and parts of, iron or steel, for railway vehicles, etc	246
for manufacture of surgical trusses	599
clock, steel for manufacture of	591
furniture	343
lamp	208
Sprinklers for fire protection	311
lawn	312
Sprocket or link chain for binders	318
Spruce clapboards	611
Spurs and stilts, used in manufacture of earthenware	587
Square reeds for manufacture of whips	576
Square timber	611
Squares, bar iron or steel, rolled	229
Squills, root, unground	515
Squirrel cages	287
Stained glass windows	202
Stair linen	361
pads	396
Stamp mills	315
Stamps, postage, collections of	473
Stannate of soda	586
Starch and similar preparations	60
corn	60
rice for the manufacture of	54
Stars, iron or steel, n. e. s	228
Statuettes, n. e. s	351
Stave bolts	611
Staves of wood	611
Stays, dress, flat wire of steel for manufacture of	592
Stay laces	405
Stearic acid	19
Stearin, animal, n. e. s	18
Steam engines, portable, and parts	315
n. e. s	315
Steel angles for iron vessels, etc	542
rolled, less than 35 pounds per lineal yard, n. o. p	227
n. e. s	228
articles, manufactures, etc., n. o. p	321
axles, axle bars, etc., for railway vehicles, etc	246
axle bars, for manufacture of axles	600
bands, thinner than 18 gauge, n. e. s	234
8-inch and less wide, 18 gauge and thicker, n. e. s	229
more than 2½ cents per pound, n. o. p	236
bar, rolled	229
bars, railway, n. e. s	238
hammered, n. o. p	243
more than 2½ cents per pound, n. o. p	236
Steel beams for vessels	542
rolled, less than 35 pounds per lineal yard	227
n. e. s	228
billets	226
for springs and axles	600
blooms	226
boiler tubes	249
boilers and machinery, n. e. s	315
bolt blanks	279
bolts	279
bowls for cream separators	588
brads, sprigs, and tacks, n. o. p	259
bridge plate, universal mill	230
bridges	242
buckles, n. o. p	305
caps for whip ends	576
castings in the rough, n. e. s	244
chains ⅜ of an inch and over	261
channels, rolled, less than 35 pounds per lineal yard, n. o. p	227
n. e. s	228
chrome	235
column sections, further manufactured than rolled, etc	242
crucible sheet, for manufacture of mower and reaper knives	590
cutlery, n. o. p	284
cut to shape for spade and shovel blanks	291
eye bar blanks, flat	228
fencing, barbed wire	602
buckthorn strip, etc	263
flats	239
forgings, n. e. s	243
for manufacture of files	700
bicycle chains	597
hammers, augers, and auger bits, etc	598
tubular bow sockets	596
knob and lock manufacturers and cutters	594
corset steels, clock springs, and shoe shanks	591
saws and straw cutters, cut to shape only	589
manufacture of skates	593
buckle clasps, bed fasts, furniture casters, and ice creepers	595
galvanized sheet, manufacture of, n. o. p	309
girders, rolled, less than 35 pounds per lineal yard	227
n. e. s	228
hinge blanks	279
hinges, T and strap, n. e. s	279
hollow ware, enameled, agate, etc	307
plain, etc	308
hoop, 8 inches and less wide, 18 gauge and thicker, n. e. s	229

	Number of tariff item.
Steel hoop, thinner than 18 gauge, n. e. s.	234
more than 2½ cents per pound, n. o. p.	236
ingots and cogged ingots	226
joists, rolled, n. e. s.	228
knees for iron vessels, etc.	542
knife blades or blanks and table forks, in the rough	285
loops, etc.	226
manufactures, not manufactured in Canada, for ships and vessels	542
masts for ships or parts of	542
nails, cut	255
nail rods, Swedish	237
nails, n. e. s.	255, 256
netting	270
nut blanks	279
nuts	279
pieces, punchings, or clippings of plate, etc.	223
pipe, fittings for	254
plate, universal mill or rolled edge	230
agricultural, cut to shape, etc.	317
more than 2½ cents per pound, n. o. p.	236
engravers'	301
plates, for iron or steel vessels, etc.	542
30 inches wide and over and ¼ inch and over thick	231
sheared or unsheared	232
puddled bars	226
rails, crops from, etc.	223
not less than 45 pounds per lineal yard for railway tracks, etc.	585
railway bars or rails, n. e. s.	238
ribs for manufacture of umbrellas, parasols, etc.	572
rivets	279
rolled round wire rods for manufacture of wire	574
rolls, chilled	254
scrap, old, etc., recovered from wrecks	581
having been in use	223
screws, n. o. p.	260
scroll, 8 inches and less wide, 18 gauge and thicker, n. e. s.	229
thinner than 18 gauge, n. e. s.	234
more than 2½ cents per pound, n. o. p.	236
sections, rolled, less than 35 pounds per lineal yard, n. o. p.	227
n. e. s.	228
shafting, tunnel, etc.	243
shapes, hammered, n. o. p.	243
rolled, less than 35 pounds per lineal yard	227
n. e. s.	228
sheets, 17 gauge and thinner, n. o. p.	234
flat, galvanized	234
coated, n. o. p.	234
for iron vessels, etc.	542
sheared or unsheared	232
more than 2½ cents per pound, n. o. p.	236
Steel skelp, sheared, etc., n. e. s.	232
for manufacture of steel pipe	233
slabs	226
spikes, cut	255
spring, flat, for springs and axles	600
for the manufacture of surgical trusses	599
spiral, for manufacture of spiral railway springs	601
springs, for railway vehicles, etc.	246
stars, rolled, n. e. s.	228
steam engines, n. o. p.	315
strip for manufacturing wire fencing 8 inches and less wide, 18 gauge and thicker	229
thinner than 18 gauge, n. e. s.	234
more than 2½ cents per pound, n. o. p.	236
structural sections, building and bridge, rolled	228, 242
tees, less than 35 pounds per lineal yard	227
n. e. s.	228
tires, locomotive and car wheel, rough	551
trough sections, rolled	228, 242
tubing, over 2 inches in diameter	251
2 inches in diameter or less, n. e. s.	252
tubes or pipes, other, n. o. p.	253
rolled, not welded, etc., not over 1½ inches in diameter	250
seamless, for bicycles	250
ware, n. e. s.	308
washers	279
wire, crucible cast	625
flat, for dress stays, crinoline, and corset wire	592
for manufacture of wire fencing	602
for manufacture of mattresses	628
galvanized, 9, 12, and 13 gauge	603
for manufacture of boots, shoes, etc.	627
zees, n. e. s.	228
Steels, corset	362
table and butchers'	284
steel for manufacture of	591
Stem seeds, crude drugs, not edible, etc., n. o. p.	515
Stereotypes for almanacs, etc., n. e. s.	302
matrices or copper shells for	302
of books, etc., matrices or copper shells for	604
for newspaper columns	303
bases, matrices, and copper shells for	303
Sterling silverware	293
Stick lac	517
Sticks as last blocks, etc., rough hewn or sawed only	611
umbrella, etc., rough or cut to length only	572
bamboo reeds for	499
n. e. s.	337

	Number of tariff item.
Sticks, walking, n. e. s.	335
bamboo reeds for	499
Stilts and spurs, for the manufacture of earthenware	587
Stirrups of wood	612
Stock, animals for improvement of	457
florist, viz, palms, orchids, azaleas, cacti, flower bulbs, etc	526
fowls for improvement of	514
live, settlers'	455
seedling, for grafting	526
Stockinettes for rubber boots and shoes	383
Stockings of all kinds	387
Stone, building, dressed	194
not hammered, etc	193
baths, tubs, and washstands	186
chalk	525
china or Cornwall	525
cliff	525
flint	525
manufactures of, n. o. p.	196
paving blocks	194
pumice	567
Stones, burr, rough, for binding into millstones	496
curling	511
ground flint	525
lithographic, not engraved	190
precious, n. e. s., polished but not set, and imitations of	348
precious, in the rough	525
Stoneware, brown or colored	185
demijohns, churns, or crocks	182
Store furniture	343
Stores, military, by and for use of army and navy	449
for use of Canadian militia	450
Stove plates	245
linings	181
Stoves	245
Stranded wire	269
Strap hinges	279
Strawberries, wild	526
n. e. s.	75
Strawberry wine	8
Straw boards	135
carpeting, rugs, mats, etc	396
Straw cutters, steel for	589
knives	290
steel for manufacture of	598
Straw plaits	563
Strength testing machine	283
Strip fencing, buckthorn	263
wire, etc., for manufacture of	602
Strips, aluminium	476
german and nickel silver	584
brass	492
horn in the rough	537
iron or steel, 8 inches and less wide, 18 gauge and thicker, n. e. s.	229
platinum	564
thinner than 18 guage, n. e. s.	234
steel, more than 2½ cents per pound, *n. o. p.*	236
Structural sections, building and bridge	228
work, iron or steel	242
Stuff, rough, n. e. s.	160
Subacetate of copper, dry	502
Substitute, rubber	573
for extract of coffee, n. e. s.	30
roasted or ground coffee	89
Sugar above No. 16 Dutch standard in color	435
cane, sirups, and molasses	440
candy	438
concrete	436
drainings or pumpings, drained in transit	436
grape or glucose	437
maple	439
n. e. s., not above No. 16 Dutch standard	436
Sugars, refined	435
Sulphate of alumina	476
ammonia	477
copper (blue vitriol)	502
iron (copperas)	502
lime	502
soda, crude	586
Sulphide of sodium	586
Sulphur, crude or in roll or flour	502
Sulphuric acid	144
articles for the manufacture of	564
ether	146
Sumac and extract thereof	517
Sunday school lesson pictures	464
Sunflower seed	61
Sunshade sticks or handles, n. e. s.	337
of bamboo, not manufactured	499
Sunshades, articles for the manufacture of	572
Sunshades	401
Surgical belts and trusses	152
dressing, antiseptic	152
instruments	153, 605
needles	153
trusses, steel springs for	599
Suspenders or parts thereof	404
Suspensory bandages	152
Sweats, hat, for the manufacture of hats	533
Swedish rolled iron or steel nail rods, for manufacture of horseshoe nails	237
Sweepers, carpet	343
Sweepings, gold and silver	495
Sweet potatoes	64
spirits of niter	7 (*d*)
Sweetened gums	438
Swine for improvement of stock	457
Switches for railways	240
Swords	306
Sycamore, lumber and timber, planks and boards of	611
sawdust	614

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Table cloths, n. o. p.	361
forks, not handled, etc	285
oilcloth, enameled	398

	Number of tariff item.
Table steels	284
ware, glass, cut, molded, or pressed	208
blown	208
Tables, bagatelle	340
billiard	340
slime, gold mining	555
Tablets with movable fixtures for schools of blind	460
Tacks, brass and copper	276
cut, and tacks n. o. p.	259
shoe	259
Tafia bitters	7 (a)
Tagging metal for manufacture of shoe and corset laces	606
Tags, shipping, etc	127
Tailors' fashion plates	469
irons	245
shears	284
Tails, undressed	607
Tallow	19
Tampico	521
Tank bottoms, sugar	436
Tanners' bark	517
scrap leather	213
Tannic acid	484
Tanning articles in crude state, n. e. s.	517
books on	464
Tape, rubbered, etc	385
lines	422
Tapioca	53
Tar, coal	507
dyes	477
pine	507
Taraxacum root unground	515
Tarred paper	135
Tartar, cream of, crystals	502
emetic	502
gray	502
Tartaric acid in crystals	502
Tassels	362
yarn for manufacture of, etc	630
Tea adulterated with spurious leaf, etc., prohibited	640
imported direct from country of growth	608
lead	610
n. e. s.	87
purchased in bond in United Kingdom	608
Teak, African, lumber and timber, planks and boards of	611
sawdust	614
Teasels	609
Tedders, hay	315
Tees, rolled iron or steel, less than 35 pounds per lineal yard	227
n. e. s.	228
Telegraph rates	124
instruments	294
Telephone instruments	294
Tennis nets, lawn	434
Terra cotta ornaments	351
japonica	517
Terne plate	234
Textile leather heads for manufacture of whips	576
T hinges	279
Thongs for whips	217
Thread, cotton, sewing, in hanks	370
on spools	371
n. e. s.	371
gilling	524
rubber elastic	575
Thrashers	315
Thumbs and tips for manufacture of whips	576
Tickets	127
Tie plates, railway	239
Ties, railroad	611
Tiles, drain, not glazed	183
earthenware	184
Timber, hewn or sawed	611
manufactured, n. e. s.	329
of certain kinds, rough sawn, etc.	611
round, unmanufactured	611
ship	611
squared or sided or creosoted	611
Tin crystals	610
foil	610
in blocks, pigs, bars, and sheets	610
manufactures of, n. e. s.	309
oxide of	502
phosphor	299
plate bars, crop ends of	223
plates	610
strip waste	610
Tinware	309
Tinctures, alcoholic, n. e. s.	7 (b)
n. o. p.	147
Tinsmith's tools	289
Tips, cue	340
horn, in the rough	537
lava or other	297
and sides, and linings for hatters'	533
for manufacture of whips	576
Tippets, fur	407
Tires, bicycle, duck or canvas for manufacture of	516
locomotive and car wheel, of steel, in the rough	551
Tobacco, cut	443
manufactured, n. e. s.	444
pipes	423
pouches	423
unmanufactured, unstemmed, for excise purposes	445, 616
unmanufactured, stemmed, for excise	446, 616
Toilet cases	351
clippers	284
combs	427
preparations, alcoholic	7 (c)
nonalcoholic	149
of petroleum, similar to vaseline	178
Tomatoes, fresh	65
n. e. s., in cans, etc	66
Tonquin beans, crude only	526
Tonics, n. o. p.	147
Tool bags	424
Tools, hand or machine	289
loading	306
settlers'	455

	Number of tariff item.
Tools, track	289
Tooth powders and washes	149
washes, alcoholic	7 (c)
Topographical globes	461
Tops, chimney	184
worsted	391
n. e. s.	629
Torpedoes	416
Tortoise shells, unmanufactured	527
Tow, flax	521
surgical dressing	152
Towels	361
Toys	351
Track tools	289
Tracts, religious	464
Tragacanth, gum	531
Transfers taken from plates, engraved on wood or metal	301
Travelers' baggage	452
carriages for	453
Traveling rugs	389
Trawl twine for nets, etc	524
Trawls and trawling spoons	319
Tray cloths, damask of linen, etc	361
Tree nails	615
Trees, viz, apple, cherry, peach, pear, plum, and quince	73
fruit, seedling stock for grafting	526
shade, lawn, and ornamental	74
n. e. s	526
saddle, Mexican	612
Tricycles	325
Trimmers	284
Trimmings, brass, for bedsteads	617
Troches, n. o. p	147
Trophies, honorary	473
Trucks	324
Trunk nails	256
Trunks	424
Trusses, surgical	152
steel springs for	599
Tubes, boiler, wrought iron or steel	249
corrugated, for marine boilers	249
rolled iron, not welded, for manufacture of bedsteads	617
steel, not welded, seamless, not more than ½ inch in diameter	250
seamless, for bicycles	250
Tubers	526
Tubing, brass	492
copper	492
lacquered or brass covered, for manufacture of bedsteads	617
wrought iron, etc., for mining, etc	555
platinum, by manufacturers of sulphuric acid	564
wrought iron or steel, over 2 inches in diameter, n. e. s	251
2 inches or less in diameter, n. e. s	252
iron or steel, other, n. o. p	253
Tubing, zinc, seamless drawn	633
Tubs	330
n. o. p	186
Tubular bow sockets, steel for	596
rivets, hoop iron, for manufacture of	538
Tufa, calcareous	477
Turkish rugs or carpets	397
Turmeric	517
Turnip seed	526
Turpentine, raw or crude	618
spirits of	166
Turtles	619
Tuscan plaits	563
Tweeds, wool, worsted, hair of alpaca, goat, etc., n. e. s	394
Twills, to be dyed and finished in Canada, etc	386
Twine, n. e. s	431
articles, manufactures of, n. o. p	434
for harvest binders	433, 620
jute, flax, or hemp yarn for the manufacture of	546
rove, for manufacture of twine for harvest binders	432
sail, of hemp or flax	411
Twines, fishing, to be used in making nets, etc	524
Twist, silk	373
Twisted brass, iron, and copper wire for manufacture of boots and shoes	627
Twisted wire, n. e. s	269
Type metal	299
for printing	300
Typewriters	315
for schools of the blind	460
settlers'	455

U.

	Number of tariff item.
Ultramarine blue, dry or in pulp	621
Umbers, n. e. s	160
Umbrella handles or sticks, n. e. s	337
Umbrellas	401
articles for the manufacture of	572
sticks of bamboo, not manufactured	499
Unbleached cotton fabrics, n. o. p	359
Unbound newspapers, magazines, etc	469
Uncleaned hair	532
Undershirts	388
Underwear, silk in the gum or spun for	583
Undressed feathers	28
hemp	534
tails	607
Unenumerated articles	447
Union cloths of certain kinds for manufacture of mackintosh clothing	381
collar cloth paper, glossed or finished	133
not glossed or finished	132
Universal mill steel plate	230
Unmanufactured bamboos, osiers, and willows	499
caoutchouc	573

	Number of tariff item.
Unmanufactured india rubber	573
lava	502
palm leaf	562
shells	527
timber, round, n. o. p.	611
tobacco for excise purposes.	616
whalebone	623
Unplumed quills	569
Unset diamonds	513
Unsigned notes, drafts, etc	128
Upholsterers' hardware	280
Upper leather, dressed, waxed, or glazed	212
V.	
Vaccine	515
points, ivory	515
Valerian root, unground	515
Valises	424
Valley, lilies of the	526
Vanilla beans, crude only	526
Vanners, mining	555
Varnish, black and bright, for ships' use	622
Varnishes, spirit	161
n. e. s	168
Vaseline and similar preparations of petroleum	178
Vaults, doors for	283
Vegetable fibers	521
manures	520
Vegetables, n. o. p	43
n. e. s., in cans or other packages.	66
labels for	127
Vehicles, viz, freight wagons, drays, sleighs, etc	322
buggies, etc., n. e. s	323
settlers'	455
Velveteens	368
Velvets	368
silk	368
Veneers of ivory	543
wood	331
Vents, chimney	184
Verdigris, dry	502
Vermicelli	59
Vermouth, wine	7 (*e*)
Vessels, foreign, applying for Canadian register	409
felt, adhesive, for sheathing	519
wire rigging for	626
wood, iron, steel, or composite, beams, sheets, etc., for	542
iron, steel, or brass manufactures, not manufactured in Canada	542
wrecked in Canadian waters, scrap iron and steel from	581
Vestments, church	408
Vinegar	141
Vines, grape	74
Vises	289
Vitriol, blue	502
Vulcanized fiber	341
W.	
Wadding, sheet, cotton	358
Wads, gun	306
Wads, gun, felt board for manufacture of	535
Wagon blocks, rough hewn or sawed only	611
skeins or boxes	247
Wagons, farm	315
freight	322
Waists, ladies' and misses'	366
Walking sticks, bamboo reeds, cut into lengths only	499
and canes, n. e. s	335
Wall diagrams	463
Walnut, lumber and timber, planks and boards of	611
sawdust	614
Wall paper	138
Walnuts	96
Wares, iron or steel, n. o. p	321
Warps, cotton, n. e. s	358
Washboards	330
Washstands, n. o. p	186
Washers, brass or copper	276
iron or steel, n. e. s	279
Washes, nonalcoholic	149
spirituous	7 (*c*)
Washing machinery, coal	555
Waste of any kind, except mineral waste	570
clippings, paper	570
cotton	508
rubber	573
silk	582
tin, strip	610
Watch actions or movements	347
cases	345
glasses and keys	346
Watches	346
cases for, fancy	351
Water, cologne	7 (*c*)
color paintings by artists of well known merit	470
Canadian artists	470
jackets, blast furnace	555
lavender	7 (*c*)
mineral, natural, not in bottles	554
Waters, n. o. p	147
Water lime cement	187
Wax, bees'	20
paraffin	151
candles	22
Wearing apparel of British subjects dying abroad	454
wool, worsted, hair of alpaca, etc., n. o. p	394
settlers	455
Weaving, books on	464
Webbing, elastic, and nonelastic	400
Wedges	289
Weeders	318
Weekly literary papers, unbound	469
Weighing beams	283
Whale oil	122
bone, unmanufactured	623
Wheat	55
flour	56
Wheelbarrows	324

	Number of tariff item.
Wheels, emery	420
hubs for, rough hewn or sawed only.	611
hickory lumber sawn to shape for spokes of	611
Whip cords, to be dyed and finished in Canada, etc	386
Whips, articles for manufacture of	576
of all kinds	217
Whisky	7 (a)
Whisks	330
White ash, lumber and timber, planks and boards of	611
sawdust	614
cotton embroideries	363
fabrics, n. o. p	359
glass, obscured	202
granite ware	185
lead, dry	158
paris	624
satin	624
shellac, in gum or flake, for manufacturing purposes	531
wood, lumber and timber, planks and boards of	611
sawdust	614
zinc	158
Whiting, gilders'	624
or whitening	624
Wicks, lamp	418
Wild blueberries	526
raspberries	526
strawberries	526
Willows, unmanufactured	499
Windmills	315
steel for manufacture of	598
Window blinds, paper	138
cornices and poles	343
glass, common and colorless	201
memorial	202
shade rollers	344
shades, n. e. s	399
Windows, stained glass	202
wire	343
Wine, ginger	7 (e)
spirits of	7 (a)
vermouth	7 (e)
Wines, containing more than 40 per cent spirits	10
medicinal, alcoholic	7 (b)
not over 40 per cent spirits	7 (f)
of all kinds, except sparkling	8
sparkling	9
Wire, barbed	262
brass	265
iron, steel, or zinc, for boot and shoe manufacturers	627
cable, n. e. s	269
cloth of brass or copper or woven wire.	267
iron or steel	270
copper	266
covered	264
corset	362
crucible cast steel	625
Wire doors, screens, and windows	343
fencing, iron or steel, n. e. s	263
barbed	602
for manufacture of fencing	602
wire mattresses	628
galvanized, of certain gauges, for fencing	262
iron or steel, 9, 12, and 13 gauge	603
iron or steel, for manufacturing boots.	627
nails, n. o. p	257
netting	270
of all kinds, n. o. p	268
phosphor bronze	299
pins	271
platinum	564
rigging for ships and vessels	626
rods, rolled round, for manufacture of wire	574
rope	269
shoe lace fasteners	553
steel, flat, for manufacture of crinoline or corset wire and dress stays	592
stranded or twisted, clothes line, picture, or other twisted wire	269
wove, iron, or steel	270
Wires, corset, covered	362
Wood alcohol	7 (a)
cork, manufactures of, n. o. p	327
unmanufactured	613
dogwood	611
fire	611
furniture, house, cabinet, or office	343
manufactures of, n. o. p	334
moldings	332
naphtha	7 (a)
pails, tubs, etc	330
persimmon	611
pulp	333
screws	260
shovel handles, "D"	612
spirit	7 (a)
staves	611
stirrups	612
veneers	331
Wool and hair of camel, alpaca, goat, etc., washed only, n. e. s	629
cloth for manufacture of mackintosh clothing	381
combing, such as is grown in Canada	390
cotton	508
surgical dressing	152
fabrics, etc., to be dyed and finished in Canada	386
and manufactures of, n. e. s	394
manufactures, viz, blankets, flannels, cloths, doeskins, cassimeres, tweeds, etc., n. e. s	394
ready-made clothing or wearing apparel, n. o. p	394
yarns costing 30 cents per pound and over	393
for manufacture of braids, cords, tassels, and fringes	630

	Number of tariff item.
Wool, n. e. s.	392
Woolen rags	570
Worm gut, unmanufactured, for whip cord, etc	500
Worsted fabrics, etc., to be dyed, etc., in Canada, etc	386
and manufactures, n. e. s	394
manufactures, viz, blankets, flannels, etc., n. e. s	394
ready-made clothing, n. o. p	394
tops	391
n. e. s	629
yarns for manufacture of braids, cords, tassels, and fringes	630
costing 30 cents per pound and over	393
n. e. s	392
Woven wire fencing, iron or steel	263
brass or copper	267
iron or steel	270
Wringers, clothes	304
Writing desks, fancy	351
ink	163
slates, school	199
Wrought-iron or steel boiler tubes, n. e. s	249
tubing over 2 inches in diameter	251
2 inches or less in diameter	252
tubing for mining, etc.	555
nails and spikes, n. e. s	256
scrap iron and scrap steel	223

X.

Xylonite collars	365
cuffs	365
sheets and in lumps, blocks, or balls, in the rough	501

	Number of tariff item.
Xyolite collars	365
cuffs	365
sheets and in lumps, blocks, or balls, in the rough	501

Y.

Yams	64
Yarn, alpaca or angora, for manufacture of braids	631
jute, hemp, or flax, by manufacturers of carpets, jute cloth, twines, etc	546
Yarns, coir	508
cotton, No. 40 and finer	508
n. e. s	358
mohair	508
wool or worsted for manufacture of braids, cords, tassels, and fringes	630
woolen, worsted, etc., costing 30 cents per pound and over	393
woolen or worsted, n. e. s	392
Yeast cakes	72
compressed	71
Yellow metal in bolts, bars, and for sheathing	632
prussiate of potash	565
Yolk, egg	515

Z.

Zinc, in blocks, pigs, sheets, and plates	633
dust	517
manufactures of, n. o. p	277
salts of	502
seamless drawn tubing	633
spelter	633
white	158
wire for manufactures of boots and shoes	627

NEW TARIFF LAW OF VENEZUELA.

The new tariff law of Venezuela, as approved by the last Congress, has not yet appeared in pamphlet form. Awaiting said publication, I have the honor to herewith inclose a clipping and translation from a journal of the chamber of commerce showing the differences between the new and old law.

WILLIAM W. RUSSELL,
Secretary of Legation.

CARACAS, *July 14, 1897.*

[Translation.]

DIFFERENCES BETWEEN THE TARIFF LAW PASSED BY THE LAST CONGRESS AND THE ONE FORMERLY IN FORCE.

Class 1, free.—There are included in this class: Mineral waters, formerly third class; iron ore and old iron, suitable for foundry purposes, formerly second class; potato sprouts, formerly third class; windmills, formerly second class.

Class 2, 10 centimes per kilogram.—There are included in this class: Liquid carbonic acid gas, elbows for water pipes, and glass dust.

Class 3, 25 centimes per kilogram.—There are included in this class: Cotton, formerly prohibited; asbestos; harness, formerly second class; muscovado sugar, formerly prohibited; gum arabic, formerly fifth class; pure lard (the mixtures and the oleomargarine formerly comprised in this class are excluded); poisons used in preserving hides, formerly fifth class.

Class 4, 75 centimes per kilogram.—Parlor air guns are transferred to the seventh class. There are included in this class: Refined white sugar, formerly prohibited; bituminous oil for cleaning harness, painted rope mats for tables, naphtha; pork, lard, mixed with other greases, and oleomargarine, formerly third class; wooden strips for matches, formerly prohibited.

Class 5, 1.25 bolivars per kilogram.—There are included in this class: Rum of all sorts, except that made from sugar cane, the importation of which is prohibited; brandy or cognac or essences thereof; absinthe, gin, and essences to 22° Cartier (beyond this grade the duties will be calculated proportionately), formerly sixth class; cotton batting; gunpowder, formerly sixth class; plug tobacco (el tabaco hueva) and twisted chewing tobacco, formerly sixth class.

Class 7, 5 bolivars per kilogram.—The importation of matches is prohibited. There are included in this class: Parlor air guns, formerly fourth class.

Class 9, 20 bolivars per kilogram.—The importation of ready-made clothing, formerly in this class, is prohibited by article 3 of the new law.

The tariff law recently passed has two new articles, as follows:

ARTICLE 4. The Executive shall have the power to prohibit the importation of all or any pieces of all kinds of ready-made clothing, of hats of all classes, caps, helmets, and trimmed caps through those custom-houses of the Republic in whose jurisdiction such industries or trades may have acquired the necessary extension and development for the supply of said articles without detriment to the consumers.

ARTICLE 13. Articles imported into the country as disconnected parts of a whole for the purpose of avoiding duty, whether in a single package or in separate packages, shall pay the duty of the class to which the article belongs when put together.

There is this difference between article 4 of the old law and article 5 of the new law: By the first, saltpeter could be imported only by druggists and in small portions; by the second, the quantity is not limited, and it can be imported by any one with the proper permit.

Between article 11 of the old law and article 12 of the new law, there is this difference: By the first, the governor was authorized to increase, diminish, and suppress duties without specifying the article; by the second, he is authorized to diminish and suppress duties on the necessaries of life only when unforeseen circumstances make it advisable, etc.

BRITISH TREATIES OF COMMERCE DENOUNCED.

BELGIUM.

I have the honor to state that the Moniteur Belge, the official paper of Belgium, published on the 1st instant a notice from the Department of Foreign Affairs, of which the following is a translation:

By an official communication of the 29th of July, 1897, the Government of Her Majesty the Queen of the United Kingdom of Great Britain and Ireland has denounced the treaty of commerce and navigation concluded on the 23d of July, 1862,

between Belgium and Great Britain. The Government of the King has acknowledged the fact of this denunciation.

According to article 25 of the treaty, the latter shall remain in force until July 29, 1898.

In notifying the denunciation in question, the Government of Her Britannic Majesty has made known that it is disposed to enter into negotiation with the Government of the King for the conclusion of a new treaty.

This news, although foreseen, for the leading papers of the country had been discussing the question for several weeks and had announced as imminent the denunciation in question, has nevertheless produced a profound sensation in the commercial centers of Belgium.

In my opinion, there is some reason for the belief that this action of the British Government may be followed by grave economic consequences for Belgium. For instance, the official statistics of the commerce of Belgium with foreign countries for 1896 show that the general importations from England into Belgium amounted to $66,204,790 and the special importations to $39,684,274. By "general importations" is meant goods in transit through the country, and by "special importations" is meant goods consumed in the country.*

The same statistics give the amount of the general exportations from Belgium to England as $108,872,072, and the special as $56,201,986.

The difference between the special importations and exportations is, therefore, $16,517,712, the amount by which the exports from Belgium to England exceed those from England to Belgium.

The principal articles exported from Belgium to England during the year 1896 were:

Articles.	General commerce.	Special commerce.
Woolen yarn	$5,338,766	$4,890,620
Linen thread	4,925,939	4,602,085
Raw wool	4,774,820	4,726,377
Iron (wrought and laminated and wire)	2,476,190	989,704
Zinc, unworked	2,716,089	2,625,958
Paper	2,002,761	1,696,663
Sugar:		
Raw	2,920,669	2,657,224
Refined	2,653,750	2,594,885
Glass	6,588,441	5,871,832

BELLAMY STORER,
Minister.

BRUSSELS, *August 2, 1897.*

A report to the same effect has been received from Consul Roosevelt, dated Brussels, August 2, 1897.

* "General importations" embrace the total imports of Belgium, goods in transit as well as goods consumed in the country, "general exportations" embrace the total exports, goods in transit as well as goods manufactured and produced in Belgium.

GERMANY.

The Department of State has received no official information relative to the denunciation of the Anglo-German treaty of commerce,* but the Imperial Gazette, Berlin, July 31, 1897, makes the following announcement:

The treaty of commerce of May 30, 1865, between the German customs union and the United Kingdom of Great Britain and Ireland was denounced on July 30 of this year by the British Government.

In consequence of this denunciation, the above-mentioned treaty, together with the supplementary agreements regulating its extension to the various German states which subsequently joined the customs union and to Alsace-Lorraine, will pass out of force on July 31, 1898.

The Berlin correspondent of the London Times (August 2, 1897) says that the tone of the comments of the German press is for the most part calm and impartial. It is considered that Germany has no cause for anxiety, since her economic position is strong enough to enable her to undertake a commerce war, should it be necessary. England, however, appears to have no intention of provoking such a war, but wishes, by means of a new treaty, to remove the obstacles to a close business connection with her colonies. So far as German relations with England alone are concerned, it is felt to be a matter of indifference whether a treaty exists or not. Almost the only cause for anxiety is afforded by the protectionist policy of the governments of British colonies. The correspondent continues:

The desire of England to respond in some material way to the commercial advantages held out to her by her colonies and the dread of German competition may, it is feared, eventually lead to the introduction of preferential tariffs. The sugar importation in particular is exposed to this danger, and here Germany is interested very considerably. In 1896, Germany exported candied and loaf sugar to the extent of 388,826 tons, valued at nearly 107,000,000 marks (in round numbers, $25,000,000), and raw sugar to the extent of 585,369 tons, valued at more than 125,000,000 marks ($29,700,000). Of these totals, 304,376 tons of candied and loaf sugar, valued at 83,700,000 marks, and 208,486 tons of raw sugar, valued at 44,700,000 marks, went to Great Britain. The English policy hitherto has been to give to the consumers cheap sugar at the cost of the English sugar refiners. It is considered in Germany questionable whether this policy will always be maintained. But, in any case, sugar would be the first article to be included in the tariff rates, as not only would the colonies be benefited thereby, but the step would inflict serious disadvantages on the sugar-exporting countries.

A special aspect of the criticisms in the Liberal sections of the press is the defense of the denunciation at the expense of the German Agrarians. While one reason for Canada's proposed tariff regulations in favor of the mother country is to be found in the movement toward British imperial federation, little doubt is felt that the colony was also actuated by economic and agricultural interests. The

*Confirmation is, however, given to the announcement in a dispatch from Ambassador Hay, *dated* London, July 30, 1897.

difficulties imposed by other countries on the importation of Canadian agricultural products must have led to a desire for retaliation. In this respect, therefore, the Agrarian agitations in Germany must be held responsible for the danger threatening the German export trade. According to another theory, England felt herself constrained to take the present step by the trend of protectionist schemes in the German Empire. The commercial treaties of the Caprivi era expire early in the next century, and even now preparations are being made for the introduction in their stead of a rigorous policy of protection. The extent to which this may be carried is not to be foreseen, and England has done well by arming herself betimes in order to insure free scope of action.

It remains, however, to the Kölnische Volkszeitung to reveal the real cause of the denunciation of the Anglo-German commercial treaty. Who seriously believes, asks the Clerical organ, that England was actuated by a desire to insure advantages for Canadian products? John Bull's sole object was "to annihilate the German export trade to the United States and thereby to deal the detested German manufacturers a fatal blow." Not Canada, but America, brought about the denunciation, for England's aim is to avail herself of the 20 per cent duty remission granted by the new tariff bill to those countries which accord the same to the United States; and she will carry this aim through, even at the cost of raising the price of necessary articles of food and of raw stuffs, for, in the opinion of the Kölnische Volkszeitung, England will have to put a duty on these articles in order to do her colonies a service by remitting it again in their favor.

The London Statist, in its edition of August 7, 1897, says in regard to the denunciation of the treaties:

Last week the British Government gave notice to Germany and Belgium of its intention to terminate the commercial treaties with those countries at the end of July next year, at the same time expressing its willingness to conclude fresh treaties. This important step is a fitting sequel to the jubilee festivities. It is a graceful recognition of the great loyalty displayed by our colonies toward the mother country and prepares the way to that closer union which this paper has strongly advocated. In twelve months' time, therefore, we shall be free from our embarrassing engagements not to permit our colonies to place higher or other import duties on the produce of Germany and Belgium than upon the produce of the United Kingdom. Our colonies will thus have complete freedom to place what duties they choose on any produce they care to purchase from the United Kingdom or from any other country, and if they so desire they may place discriminating duties on their own exports.

The action taken indicates no change in the policy of this country, and foreign nations need have no fear that British markets will be closed to their produce. It is quite possible that at some future time, when the colonies have much further developed their resources and the struggle for existence becomes still keener, we may be disposed to give a greater preference to colonial than to foreign produce, but that period has not yet come. Of course, the time may be greatly hastened by the attitude of foreign countries. The unfriendliness of Germany last year caused a wave of feeling in this country in favor of a duty upon German goods, and the Canadian offer of preferential duties to the mother country has created a responsive desire to assist Canadian trade. Should our other colonies follow the lead of Canada, which, from Mr. Chamberlain's statement, appears most likely, a strong movement might arise for giving them preferential treatment, especially if, at the same time, Germany, Belgium, or any one else were disposed to raise their duties on British goods. But neither Germany nor Belgium is likely to place any serious

obstacle in the way of concluding fresh treaties, for neither have much to lose, even should the whole of the colonies grant preferential treatment to the produce of the mother country.

The total value of the imports into our four great colonies—Canada, Australasia, Cape, and Natal—amounts to about £94,000,000 ($457,451,000), of which Germany supplies less than £2,900,000 ($14,112,850), and Belgium only £360,000 ($1,751,940). On the other hand, Germany, in 1896, sent to this country goods to the value of £27,585,000 and Belgium of £19,221,000. Hence it will be apparent that the freedom of the British market is of the greatest importance to both countries. At the same time, it must also be recognized that Germany and Belgium are important customers for both British and colonial produce—that, indeed, our exports of British produce alone, irrespective of colonial produce reshipped to these two countries, are three-fourths as great as our exports to our four great colonies of Canada, Australasia, the Cape, and Natal.

In 1896, our exports to the four colonies reached £41,088,000 ($199,954,752), while our shipments to Germany and Belgium were £30,060,000 ($146,286,990). The figures are as follows:

Exports of British produce.

To Australasia	£21, 915, 000
To Cape	10, 687, 000
To Canada	5, 352, 000
To Natal	3, 134, 000
Total	41, 088, 000
To Germany	22, 244, 000
To Belgium	7, 816, 000
Total	30, 060, 000

Including our reexports of foreign and colonial produce, however, the figures are:

Exports of British and colonial and foreign produce.

To Australasia	£24, 355, 000
To Cape	11, 515, 000
To Canada	6, 226, 000
To Natal	3, 370, 000
Total	45, 466, 000
Total in United States currency	$221, 162, 296
To Germany	£33, 985, 000
To Belgium	12, 327, 000
Total	46, 312, 000
Total in United States currency	$225, 377, 347

The latter figures are the more important, as, were it not for the German and Belgian purchases of colonial wool, our colonies might not be able to buy so much British produce. It is apparent, therefore, that the German and Belgian trade is as important to us as that the British trade is essential to these countries, and that, consequently, it is to the interests of all these countries to come to a fresh agreement by which no interruption to trade may occur.

To show exactly how our purchases from Germany and Belgium compare with their purchases from us, we set out below, first, the figures for 1896 relating to *Germany*, and, secondly, those concerning Belgium.

Our trade with Germany in 1896.

Description.	Value.	
Exports of British produce to Germany	£22,244,000	$108,250,426
Exports of colonial and foreign produce to Germany	11,740,000	51,132,776
Total	33,985,000	165,388,002
Imports from Germany	27,585,000	134,242,402
Excess of exports over imports	6,400,000	31,145,600

Our trade with Belgium in 1896.

Description.	Value.	
Imports from Belgium	£19,221,000	$93,538,996
Exports of British produce to Belgium	7,816,000	38,036,564
Exports of foreign and colonial produce to Belgium	4,510,000	21,947,915
Total exports	12,326,000	59,984,479
Balance of imports over exports	6,895,000	33,554,517

To enable our readers to form a true conception of the nature of our trade with Germany and Belgium in 1896, we have taken out in some detail our imports from and exports to these two countries. A cursory inspection clearly shows that each country supplies the other with many things it is unable to produce. Thus, for instance, Germany sent us £9,300,000 worth of sugar at a price below the cost of production, German home consumers contributing to pay for our sugar.

Imports from Germany in 1896.

Articles.	Value.	Articles.	Value.
Sugar:		Wood	£1,193,000
Refined	£6,715,000	Musical instruments	697,000
Unrefined	2,579,000	Paper of all sorts	613,000
Total	9,294,000	Toys	579,000
		Iron manufactures	513,000
Woolen:		Iron sewing machines	137,000
Manufactures	1,252,000	Zinc:	
Yarn	337,000	Crude	336,000
Rags	207,000	Manufactures	133,000
Total	1,796,000	Hemp, dressed and undressed	227,000
		Oil:	
Glass:		Palm	273,000
Manufactures	495,000	Seed	161,000
Bottles	178,000	Total	434,000
Window	87,000		
Total	760,000	Oilseed cake	211,000
		Painters' colors	202,000
Leather	263,000	Rice	122,000
Boots and shoes	27,000	Skins and furs	121,000
Gloves	94,000	Wool	116,000
Miscellaneous	31,000	Tobacco:	
Total	415,000	Unmanufactured	53,000
		Cigars	24,000
Seeds:		Parcel post	330,000
Clover and grass	223,000	All other articles	8,884,000
Flax or linseed	87,000	Grand total	27,585,000
Miscellaneous	85,000		
Total	395,000	Total, United States currency	$134,242,402

Exports to Germany of British and Irish produce and manufactures in 1896.

Articles.	Value.	Articles.	Value.
Woolen and worsted yarn	£3,515,000	Wool:	
Yarn, alpaca, mohair, etc	915,000	Noils, waste, etc	£663,000
Woolen and worsted piece	1,133,000	Flocks and rag	177,000
Total	5,563,000	Raw	95,000
Cotton:		Total	935,000
Yarn	2,069,000	Leather	338,000
Piece	1,785,000	Chemical products	312,000
Total	3,854,000	Oil:	
Coal	1,785,000	Seed	283,000
Products of	346,000	Other	56,000
Machinery	1,788,000	Caoutchouc	171,000
Metals:		Hardware and cutlery	124,000
Iron, wrought and unwrought	1,707,000	Stones, slates	124,000
Copper, wrought and unwrought	303,000	Telegraphic wires, etc	116,000
Tin	28,000	Painters' colors	106,000
Brass	28,000	Hides, raw	98,000
Unenumerated	84,000	Silk:	
Fish:		Manufactures	94,000
Herrings	793,000	Twist or yarn	26,000
Other	31,000	Cycles, etc	93,000
Linen:		Pictures	73,000
Yarn	246,000	Implements and tools	60,000
Piece	287,000	Parcel post	255,000
Total	533,000	Miscellaneous	2,137,000
		Grand total	22,244,000
		Total, United States currency.	$108,250,426

Exports of foreign and colonial merchandise from Great Britain to Germany in 1896.

Articles.	Value.	Articles.	Value.
Wool	£4,050,000	Gum	£203,000
Skins and furs	959,000	Metals, tin	174,000
Caoutchouc	735,000	Oils	154,000
Coffee	625,000	Feathers	151,000
Lard	370,000	Drugs	144,000
Indigo	283,000	Metals:	
Leather	275,000	Copper	60,000
Tea	241,000	Lead	29,000
Cotton:		Shells	74,000
Raw	231,000	Miscellaneous	2,151,000
Waste	196,000	Total	11,740,000
Tallow	219,000		
Jute	210,000	Total, United States currency.	$57,132,770
Hides	206,000		

Imports from Belgium in 1896.

Articles.	Value.	Articles.	Value.
Silk:		Wool, raw	£600,000
Manufactured	£1,991,000	Zinc:	
Raw, thrown, etc.	83,000	Crude	444,000
Woolen:		Manufactures	88,000
Yarn	1,107,000	Total	532,000
Manufactured	430,000	Paper	431,000
Rags	103,000	Leather gloves	432,000
Total	1,640,000	Hides, raw	313,000
Glass:		Leather:	
Manufactured	444,000	Boots and shoes	156,000
Window	360,000	Miscellaneous manufactures	26,000
Plate	365,000	Unmanufactured	117,000
Total	1,169,000	Total	299,000
Flax	1,078,000	Oil	295,000
Cotton manufactures	1,025,000	Clocks	291,000
Sugar:		Rabbits	251,000
Refined	433,000	Watches	198,000
Unrefined	552,000	Stones	198,000
Total	985,000	Butter	190,000
Iron manufactures	918,000	Meat	188,000
Linen:		Poultry and game	143,000
Yarn	626,000	Embroidery, etc.	142,000
Manufactures	130,000	Gold, leaves of	130,000
Total	756,000	Miscellaneous	4,249,000
Eggs	694,000	Grand total	19,221,000
		Total, United States currency.	$93,538,996

Exports of British and Irish produce to Belgium in 1896.

Articles.	Value.	Articles.	Value.
Cotton:		Coal	£135,000
Piece	£1,279,000	Products	205,000
Yarn	330,000	Fish	191,000
Total	1,609,000	Linen:	
Woolen and worsted piece	960,000	Yarn	171,000
Woolen yarn, noils, etc.	509,000	Piece	82,000
Total	1,469,000	Manure	166,000
Machinery	721,000	Leather and manufactures of	155,000
Metals:		Caoutchouc	119,000
Iron	538,000	Cycles	101,000
Copper	106,000	Miscellaneous	1,825,000
Horses	223,000	Grand total	7,816,000
		Total, United States currency.	$38,036,564

Foreign and colonial produce exported to Belgium from Great Britain in 1896.

Articles.	Value.	Articles.	Value.
Wool	£1,760,000	Leather	£86,000
Cotton, raw	274,000	Bacon and hams	84,000
Skins and furs	237,000	Lead ore	82,000
Jute	172,000	Miscellaneous	1,390,000
Coffee	171,000	Total	4,510,000
Palm oil	166,000		
Straw plaiting	88,000	Total, United States currency	$21,947,915

VALUE OF COMMERCIAL TREATIES IN GERMANY.

In 1896, Germany's foreign trade rose to dimensions not only very flattering, but hitherto unknown. The world is watching, with increasing interest, the rapid growth, not only of the Empire's inland development, but of its foreign trade. Here it is hoped that the growth of recent years has been healthy and that the results are to be lasting. In ten years, the imports doubled in weight and went up in value 1,613,000,000 marks ($383,894,000), or 50 per cent. During the same years, the exports increased 6,800,000 tons, or 36 per cent, and 702,500,000 marks ($167,950,000), or 23 per cent. Since 1895, the increase in imports was 3,870,000 tons, or 312,000,000 marks ($74,256,000); in exports, 1,900,000 tons, or 329,700,000 marks ($78,468,600). The value of commercial treaties is proven by the development of trade. Since they went into effect, imports increased 272,500,000 marks ($64,855,000), or 6.4 per cent; the exports, however, increased 703,300,000 marks ($167,385,400), or 23 per cent. The passivity of the balance of trade, as the excess of imports over exports is called, went down from 1,234,000,000 marks ($293,692,000) in 1894 to 804,000,000 marks ($191,352,000) in 1895.

The trade treaties have helped Germany's exports. No wonder she wants to make more of them. Of course, all branches have not had an equal share in these results. The nation knows now, as it never knew before, what benefits are to be secured by wise concessions, by local interests yielding to national ones, by taking counsel not from narrow, selfish men, but from men broad enough to put personal politics aside for the higher and better results of statesmanship. The Empire is as eager now to make such treaties as she was once indifferent.

The long time that it takes trade to develop, under even the very best conditions, is in favor of making trade treaties. Nothing is so necessary to business as the belief that its basis is stable. When merchants know that treaties have been made, covering tariff rates for ten or more years, it is an easy matter to make adjustments nec-

essary to meet the conditions agreed upon. The Empire's present prosperous and profitable relations with countries with which trade treaties have been made encourage the belief that others will be projected, and that every effort will be made to secure their adoption. In 1880, 78.5 per cent of the Empire's people were farmers, 21.5 per cent in cities; in 1895, 69 per cent were in the country, the rest in towns.. These figures tell their own story. The efforts to secure the farming population by passing protective legislation looking to the exclusion of food products will prove powerless, *i. e.*, if the Empire is to go on as in the years recorded above. Saxony has seen its sheep fields turned into market gardens. Argentina, all South America, Australia, Russia, Canada, and other countries, to say never a word about the United States, are making it more and more difficult for Germany to raise enough cattle and grain to feed her own people. She has to choose one of two ways—the one pursued by her wisest and best statesmen, or one leading back to the Germany behind 1870, the Germany of divided, sectional interests.

J. C. MONAGHAN,

CHEMNITZ, *June 15, 1897.* *Consul.*

THE FOREIGN TRADE AND INDUSTRIES OF GERMANY, 1896.

The commercial and industrial prosperity of Germany, which was so elaborately described in consular reports from this country for the year 1895, continued with steadily increasing volume throughout the following year. In respect to foreign commerce, there was a notable increase in both the quantity and values of imports and exports, which, in comparison with those of the three preceding years, present the following exhibit, it being understood that the values herein given are not actual, but are officially estimated by taking the average market value of each class of merchandise for the year under consideration:

Year.	Imports.	Exports.	Total.
1893	$983,908,660	$772,205,756	$1,756,114,416
1894	1,019,956,854	726,252,240	1,746,209,194
1895	1,010,574,418	814,977,450	1,825,551,868
1896	1,088,480,624	874,287,702	1,962,768,326
Increase, 1896	77,906,206	59,310,252	.....

There is thus shown a net gain of $137,216,458 over the already prosperous foreign trade of 1895.

THE BULK AND VALUES OF IMPORTS AND EXPORTS.

There is but one source of definite information on this subject, viz, the official figures published by the imperial bureau of statistics, which group the entire bulk of imports and exports under the forty-four titles or categories specified by the German tariff law, and which, as has been explained in previous reports, has the important technical disadvantage of grouping together manufactured products and the raw or partly finished materials from which they are made.

In respect to weight, the imports of Germany in 1896 aggregated 36,407,516 metric tons of 2,204 pounds and the exports 25,718,533 tons, an increase of 3,870,540 tons of imports and 1,888,874 tons of exports, respectively, over the totals of the preceding year.

In respect to values, a more elaborate comparison will be of interest, and the following table will show in United States currency the estimated values of imports and exports for 1895 and 1896, as classified under the German tariff:

Articles.	Imports.		Exports.	
	1896.	1895.	1896.	1895.
Waste of all kinds	$12,431,930	$9,662,800	$2,521,848	$2,928,590
Cotton and cotton goods	69,995,562	71,997,142	54,054,560	55,440,672
Lead and manufactures of	1,770,720	1,543,906	2,571,590	2,770,558
Brushes and sieves	713,524	688,296	4,918,746	4,489,870
Drugs, medicines, and dyes	58,026,780	55,433,294	75,782,532	71,116,542
Iron and manufactures of	11,182,906	7,322,070	76,822,830	71,821,736
Ores, earths, and precious metals	82,891,872	55,535,158	67,254,992	36,386,154
Flax and other fibers, except cotton	22,340,822	24,729,866	7,373,240	7,976,808
Grain and agricultural products	173,330,878	142,478,224	17,427,550	19,447,218
Glass and glassware	2,547,790	2,298,842	10,324,678	11,175,528
Hair, feathers, and bristles	11,179,336	10,686,914	6,991,726	6,422,430
Hides and skins	40,529,020	44,357,964	18,006,842	19,474,350
Wood and manufactures of	57,958,236	50,684,004	22,789,690	23,348,038
Hops	2,352,392	1,573,656	5,918,108	6,495,258
Instruments, machines, and vehicles	8,683,668	8,768,634	37,097,536	37,828,196
Calendars	78,064	87,584	125,664	94,248
Caoutchouc and manufactures of	10,210,914	8,505,168	7,249,480	6,528,816
Clothing of all kinds	2,522,800	2,355,962	28,577,850	24,053,708
Copper and manufactures of	16,545,046	13,217,806	20,121,948	17,364,480
Hardware	9,257,486	8,595,846	27,845,286	17,493,000
Leather and manufactures of	13,689,284	13,044,304	36,013,208	39,462,066
Linen yarn and manufactures of	6,379,828	6,039,964	5,716,046	5,984,272
Literature and art	8,489,460	7,947,296	26,924,702	25,512,648
Groceries and confectionery	149,826,636	142,230,466	81,481,442	75,713,368
Oils and fat, not otherwise specified	34,320,790	32,491,284	6,459,320	6,281,772
Paper and manufactures of	3,004,988	2,559,952	24,078,936	24,836,252
Furs	495,040	490,518	788,494	809,200
Petroleum	19,268,242	18,164,398	315,350	273,938
Silk and manufactures of	36,218,840	39,606,056	36,919,274	39,481,820
Soaps and perfumeries	430,300	625,464	3,903,100	2,554,692
Playing cards	1,666	1,904	75,208	92,820
Stone and earthen ware	7,595,770	7,557,928	6,087,326	5,202,680
Coal, coke, and peat	27,881,700	26,356,596	37,460,010	34,693,022
Straw and hemp goods	1,953,980	1,755,250	1,035,062	962,472
Tar, pitch, resin, and asphaltum	8,977,360	7,938,014	2,320,500	1,978,256

Estimated values of imports and exports for 1895 and 1896—Continued.

Articles.	Imports.		Exports.	
	1896.	1895.	1896.	1895.
Animals and animal products	$31,720,640	$30,403,310	$2,352,868	$2,187,458
Manufactures of clay	1,461,558	1,315,426	10,266,368	9,197,748
Cattle	34,733,244	44,409,134	5,539,688	6,190,142
Oilcloth	231,574	293,930	311,780	271,320
Wool and woolen goods	96,379,052	102,218,620	77,541,352	80,037,734
Zinc and manufactures of	1,305,906	1,259,972	2,643,664	5,959,044
Tin and tinware	4,412,044	3,314,626	1,254,374	1,171,674
Sundries, not otherwise classified	.....	.....	1,745,730	3,273,452
Total	1,088,480,624	1,010,574,418	864,327,702	814,930,088
Increase, 1896	77,906,206	.....	49,397,614	.....

EXPORTS FROM SOUTHERN GERMANY TO THE UNITED STATES.

The statistics of declared exports to the United States from the consular district of Frankfort and the several consulates under its supervision bring the record down to the close of the fiscal year ended June 30, 1897, and are, therefore, much more recent than any similar statistics published by the German Government. A comparison of the export values to our country from each consular district in southern Germany during the past three years ended on June 30 presents the following exhibit:

Consulates.	Year ended June 30—		
	1895.	1896.	1897.
Frankfort	$3,996,486.46	$4,368,386.59	$4,909,750.34
Aix la Chapelle	1,220,558.31	1,610,675.73	1,901,319.23
Bamberg	454,112.87	557,920.13	567,420.15
Barmen	6,482,897.30	6,707,591.38	6,428,456.77
Cologne	2,037,256.15	2,619,232.40	2,164,045.59
Crefeld	3,392,516.81	3,948,812.68	3,198,461.65
Dusseldorf	693,041.99	909,873.63	995,373.60
Freiburg	1,302,582.82	1,303,807.90	1,445,922.74
Fürth	1,550,252.68	2,059,322.61	1,946,251.29
Kehl	690,454.93	1,123,948.60	955,533.42
Mannheim	3,648,989.94	3,875,538.22	3,468,261.72
Mayence	1,898,816.65	2,144,000.33	2,019,961.00
Munich	658,044.94	758,985.52	859,276.50
Nuremberg	1,406,740.42	1,525,204.17	1,561,521.75
Sonneberg	2,039,450.74	2,752,933.50	3,311,595.70
Stuttgart	1,003,555.21	1,164,594.27	1,168,577.96
Weimar	582,437.92	760,590.18	883,933.67
Total	33,058,196.14	38,193,414.34	37,780,663.08

Of the last year's exports, by far the greater proportion belong to the first six months of 1897, during which period legislation on import duties has been imminent or actually in progress. Thus, the

total exports from South Germany to the United States during the last six months of 1896 aggregated $16,712,098.47, while those of the first two quarters of 1897 reached an aggregate declared value of $21,068,564.61.

GENERAL PROSPERITY OF GERMAN MANUFACTURES.

To report that the manufacturing industries of Germany have been active and prosperous throughout the year 1896 and down to the date of this report, and that the published complaints of growing German competition in Great Britain, France, South America, and elsewhere have only served to stimulate the German Government, as well as manufacturers, merchants, banks, chambers of commerce, and steamship companies to new and more determined exertions to enlarge and extend their export trade, would be to merely repeat what has been told and reiterated in full and circumstantial detail by reports from the United States consular officers in this country. Nothing that can contribute to the development or protection of Germany's foreign commerce has been neglected or is likely to be in the future. The Imperial Government, the great banks of Berlin, Hamburg, Frankfort, and other financial centers, the State railways, subsidized steamship lines, consuls and ambassadors, technical and trade schools—in short, the Government and people (with the exception of the Agrarian leaders) labor together for this result, which is the keynote of Germany's national policy to-day.

Among the more important enterprises for the promotion of German export trade during the year under report was the organization of an economic expedition to China and Japan, which sailed in February last, and is still absent. The proposition came originally from the silk manufacturers at Crefeld, but it was immediately seconded by the textile industries of Augsburg, Saxony, and Barmen, the cotton exchange of Bremen, the North German Lloyd Steamship Company, and behind all the Imperial Government. Each of these organized interests sent from one to three expert representatives, whose duty it is to study the wants and tastes of the Chinese and Japanese and instruct their special industries at home how best to carry German competition into those markets and make it as nearly as possible irresistible.

Preparations have been already begun for a German exhibit at Paris in 1900 which shall eclipse any display ever before made or attempted by the Fatherland, either at home or abroad. Notwithstanding all historical and political differences and resentments, the economic interests of the two countries are, after all, very closely allied, and it seems to be the imperial policy to conciliate France by all legitimate means. German exports to France in 1895 amounted

to 229,900,000 marks ($54,716,200) and imports into Germany from France during the same year were valued at 202,800,000 marks ($48,266,400), so that, in respect to her direct trade with France, Germany already holds the second place in the list. The great department stores of Paris are piled with goods which, although bearing French labels, are in fact made in Germany and German commercial travelers work the provinces of France with bag and sample as industriously as they do Italy, Russia, the United States, and the South American republics.

It is intended that the exhibit at Paris shall be a complete, harmonious picture of the resources and industries of Germany down to the latest date. Everything is to be collected at home, assorted, adjudged, classified, and its position assigned by an expert imperial commission, so that duplicates and everything trivial or inferior to the best shall be excluded, and the whole display presented in its most striking and effective form. The German section at Paris in 1900 promises to be even a greater surprise than it was at Chicago in 1893, and it will be made and managed for the express purpose of showing the merchants of all civilized nations what Germany has to sell.

Apropos of this subject, it may be stated that the interest in industrial exhibitions has been greatly stimulated by the demonstrated results of the Bavarian Trade Exposition which was held at Nuremberg last year. Although not large, this was an admirably conceived and managed display of the commercial products of Bavaria, and it occurred to the managers to keep a careful record of its practical results, as shown by sales actually made and orders taken on the spot for future delivery. The record at the close showed 9,117 sales and 8,728 orders, with an aggregate value of 3,381,786 marks, equivalent to $804,865, although the commercial feature was, of course, wholly secondary to that of displaying together and making known the artistic and scientific industries of the Kingdom.

INLAND WATER TRANSPORTATION.

No one who studies the underlying causes of German industrial progress can fail to notice the important and rapidly increasing rôle that is played by the canals and navigable rivers, which are being improved and extended year by year and carry freights at such low rates that protective economists begin to complain that they render the importation of foreign merchandise altogether too cheap and easy. A few figures will show the enormous development of inland water traffic in this country during the past ten or twenty years. Prior to the canalization of the River Main from Frankfort to its confluence with the Rhine at Mayence, which was finished in 1886, only small boats ascended the river to this point, and Frankfort had

a total river traffic of not more than 150,000 tons, against 930,000 tons of freight received and sent annually by rail, the percentage of each being as 14 to 86, respectively. During the first five years after the river was canalized, the water traffic rose to 700,000 tons, against 1,400,000 tons by rail—an increase of 467 per cent by river to 50 per cent increase by rail. Since then, the river traffic has steadily increased year by year to a total of 1,753,799 tons in 1896, to which is to be added 225,253 tons of logs and lumber arriving in the form of rafts from the Upper Main. Similarly, the trade of Cologne rose from 200,000 tons in 1876 to 1,000,000 tons in 1896, and the grand aggregate of the German Rhine ports grew from 5,100,000 tons to 16,250,000 tons during the same period.

The total length of German canals and inland waterways is 8,700 miles, and important extensions, such as the Oder canal group and the Elbe–Trave canal, are still in course of construction. The Danube–Oder and Oder–Moldau–Elbe canals will, when completed, form a continuous waterway nearly 2,000 miles long, and will connect the waters of the Baltic with those of the Black Sea.

AGRICULTURE AND THE SUGAR INDUSTRY.

The rapid conversion of Germany from an agricultural to an industrial and commercial nation has inevitably imposed great hardships upon the farming and landowning classes, and the division, political and economical, between the Agrarian party on the one side and the commercial and industrial classes on the other seems to grow deeper and more determined. The agriculturists feel that most of the favors of government are reserved for the interests of manufacture and trade, while they, bound to their costly lands, which can be kept productive only by careful tillage and the use of expensive fertilizers, are left exposed to the competition of food products from newer and more fertile countries, where taxation is trifling compared with that which prevails in Germany. Various measures of protection, extending to the absolute prohibition of cereal imports, have been proposed by the Agrarian leaders and uniformly rejected by the Reichstag as impracticable and ruinous. The one notable exception to this was the sugar legislation of May, 1896, which, after a long and heated discussion, was granted as a palliative to the agricultural interest. This measure, which has been fully described in these reports, sought, by restoring and increasing the bounty on exported beet sugar, to fortify and secure against future danger the supremacy which the German sugar industry had already won; but, for reasons that were readily foreseen, the act has proven abortive in that its effects have been to enlarge the area of beet culture in Germany and increase the cost of sugar for home consump-

tion while reducing its price in foreign markets, thus practically taxing the German people for the benefit of dealers and consumers in Great Britain, the United States, and other sugar-importing countries. The situation thus created has been so abortive and disappointing that radical amendments to the existing law have been proposed by the leaders of the sugar interest. The recent debate over these propositions is thus synopsized by the editor of the Deutsche Zuckerindustrie, an expert authority on the subject:

The debate presented an unsatisfactory picture of the most studied perversion of facts on the part of the Left and defective acquaintance with the subject on the part of the Right side of the house. The discussion has had at least one result, viz, that the Union of Sugar Manufacturers, from which the proposals for alteration originated, is freed from all further responsibility for the further continuance of the unfortunate "contingent" arrangements. The entire responsibility now rests with the federal governments, who have had given them a proof that the Reichstag is not, on its own initiative, in a position to repair the sins it has committed.

The same journal elsewhere remarks:

Another sugar debate in the German and Austrian parliaments would hardly result in a victory for those concerned in the manufacture of sugar.

IMPORTS OF AMERICAN MANUFACTURES.

The past year and the first six months of 1897 have witnessed a notable increase in the export of certain kinds of American manufactured articles to Germany. Particularly is this true of tanning and shoemaking machinery, bicycles and bicycle parts, and sundries, in all of which lines the superiority of the best American makes is clear and undisputed. In respect to tanning, it may be said that Germany has now adopted American machinery and methods so far as they can be applied to the conditions existing here, and the sale of improved tanning and leather-dressing machines from Boston, Chicopee Falls, and other places in our country has reached within the past six months proportions never before attained. There has been during recent years an enormous export of hides and skins from Germany to the United States, a large part of which returned to this country in the form of finished leather. This showed, of course, the superiority of the American tanning system, especially by the chrome process, and the German tanners have been quick to learn the lesson and welcome the introduction of the machinery by which such results are accomplished. They also go to our country and make a round of visits among the tanneries, bringing back in many cases an experienced foreman to teach their employees the improved methods. While there will continue to be a demand for certain grades and qualities of American tanned leather, the prospect is that, with the enlarged and improved facilities that are now being so

rapidly introduced, Germany will become more and more independent of all foreign supplies.

The importation of American bicycles has continued on a scale far beyond that of any previous year, and the product of several leading makers is now retailed in all the more important cities. Their price is from 20 to 30 per cent greater than is asked for home-made wheels, and they are used generally by the more wealthy, luxurious classes, who appreciate and can afford to pay for the best of everything that can be obtained. This has naturally roused the German bicycle manufacturers to an attitude of militant hostility against all imported bicycles, especially those of American origin, which are recognized as the most dangerous to their own trade. Their resentment has taken the form of fervid appeals to the Government to impose greatly increased duties on all imported bicycles, with a differential and much higher rate against those of American manufacture. Several of the cycle-trade journals, organs of the manufacturing interest, refuse to accept advertisements of American bicycles or fixtures, and their editorial columns are eloquent with patriotic appeals to their countrymen to ride only German-made wheels.

Meanwhile, the German cycle manufacturers, of whom there are about fifty established firms, employing in all over 25,000 workmen, have gone on studying and copying many of the superior features of high-grade American bicycles, and have thus rapidly improved their standard of excellence, though it is conceded that the peculiar grace of model, easy-running qualities, and rigidity of structure combined with extreme lightness that characterize the best grade of American wheels has not yet been attained in this country. Wooden wheel rims and handle bars, single-tube tires, and American lamps, cyclometers, and other materials and fixtures are now more extensively used in this country than ever before, as the German-made bicycle approaches more nearly to the best American type. There will continue to be here, at least for some years to come, a market for the highest grade of American-made bicycles, but their quality must be kept up to the highest attainable standard, and their price gradually reduced to meet upon equal terms the best product of the native manufacturers.

THE GERMAN MARKET FOR AMERICAN MANUFACTURES.

American consulates in this country receive constant inquiries from manufacturers, merchants, and exporters' associations asking what chance there may be here for the introduction of every conceivable product, from shoe laces to printing paper and fertilizers. Some of these inquiries are obviously made at random, as the articles

to which they refer are more abundant and cheap here than anywhere else in the world, and are exported, through more or less advanced import duties, to the United States.

It should be clearly understood that Germany offers no open, ready market for the manufactured goods of any country. Her imports are principally food products and the raw materials which are consumed by her own rapidly growing industries. When Germany imports a manufactured product it is because that product is better in quality or cheaper in price, one or both, than can be produced at home. There is now a practicable market in southern Germany for the following articles of American origin, provided, always, that they are offered here by competent salesmen who can explain what they have in hand and sell it upon the long-established terms and conditions which have been so often explained in consular reports, and which involve the essential principle that the goods shall be paid for when they have been received and seen by the purchaser.

(1) Leather, particularly chrome-tanned glazed kid, American russia, and also furniture leathers, such as are used for upholstering railway cars, smoking rooms, and heavy furniture. Chrome-tanned kid leather, such as is made in Philadelphia, Wilmington, Newark, Boston, Milwaukee, and Chicago, is now imported in large quantities to Germany, and has a high and firmly established reputation. Within the past two weeks a third American leather house has been opened in Frankfort, with excellent prospects for a successful business.

(2) American shoes, notwithstanding all doubts and a certain timidity on the part of American exporters, are steadily finding their way to Germany, generally by way of London or Paris, and are meeting ready sale. There are now two stores at Frankfort and three at Wiesbaden, in this district, where American-made shoes are kept, but as yet in small assortment and limited quantities. The same situation is reported from Berlin, Hamburg, Dresden, and other leading German cities. From all that appears, the prices charged are inordinately high in comparison with the retail values of similar shoes in America, and the grades offered are not above medium or common. The statement is here reiterated, upon the judgment of competent experts, that in every important German city or large town there could be established with practical certainty of success an American shoe store, which should sell at wholesale and retail the product of firms of acknowledged preeminence, whose names stand for a recognized quality in the shoe trade. These goods should be tastefully displayed and sold at American prices, plus the cost of exportation, duty, and other incidentals, and when sold in lots to German retailers the name and location of the manufacturer

and its retail price in marks and pfennigs should be stamped or labeled on each shoe. Such American shoes as are now sold here are offered as a costly luxury, whereas the fact is that good factory-made boots and shoes are cheaper, quality considered, in the United States than anywhere else in the world.

(3) Lumber and timber. The importation of American lumber, oak staves, and roughly squared logs to be afterwards sawed is steadily increasing, especially since certain exporters have had the enterprise, during the past two years, to come over and study the market and form personal relations with the importers, some of whom have responded by going in person to the United States to make purchases. Complaints are heard of bad faith on the part of certain exporters, who have sent squared logs of oak and walnut which, on being sawed, proved almost worthless, and even sawed oak flooring so wormeaten and filled with knots as to be unmarketable. An American lumber merchant who made a highly successful tour of the Rhine cities last May stated to the undersigned that he saw at Rotterdam some squared logs that had been shipped on consignment by an American exporter, which his firm "would not have thought worth hauling out of the woods." Southern oak, being softer and more easily worked, is generally preferred in Germany to that grown in the Northern States and Canada. Here, as elsewhere, the invariable principle obtains that only the best of everything that can be turned out, from canned meat to staves, should be exported to a country so critical and so resentful of imposition as Germany.

(4) There is also a good market here for roofing slates, provided they can be furnished of good, uniform color and quality and so packed and shipped as to minimize the loss by breakage in transit. It is the opinion of good judges that if the slate makers of the United States would organize so as to classify and control their surplus product for export, they could in a few years not only hold the German market against England, but invade Great Britain itself. Some months ago the principal slate dealer in this region applied to this consulate for advice in opening connections for importing American roofing slates, the supply in Germany being unequal to the demand. An exporting firm was recommended and a trial order given, which was filled promptly and to the entire satisfaction of the purchaser, the slates being of good color and in excellent condition. Thus encouraged, the same dealer gave another and much larger order, which overtaxed the legitimate resources of the exporter, who thereupon gathered up from various quarries enough odds and ends to fill the order. Not only was this shipment of such various colors as to be practically unmarketable, but, owing to defective packing and

rough handling, the breakage amounted to nearly 20 per cent, and a promising trade was thus ruined at its inception.

(5) There ought to be in Germany a far more extensive market than has yet been developed for American mechanics' tools, but this branch of trade presents some peculiar difficulties. The carpenters' and joiners' tools used in this country, notably saws, hammers, planes, and mortising and boring implements, are rude and poor compared with those made and used in the United States; but they have two important merits—they are very cheap and they are what the German mechanic has been accustomed to use since his boyhood. Hardware dealers will generally admit the superiority of American tools, locks, and other hardware, but say that, by reason of their higher price, their sale is and must long remain limited in this country. There are indications, however, that the conservatism of German mechanics in this respect is slowly yielding to more progressive ideas, and with the increased use of improved machinery and machine tools, the demand for mechanics' tools of improved forms and quality has been noticeably stimulated.

But—and here is the marrow of the whole matter—whatever the article to be sold, it is useless for American exporters to expect, as so many of them obviously do, that German retailers and jobbers will order direct supplies of American manufactured goods from catalogues and circulars printed in English, in dollar prices and pounds avoirdupois, pay for them free on board at the factory or New York, and take all the chances and risks of importation in small quantities on their own account. Generally speaking, American goods, to be introduced in Germany, must be offered here as German and English goods are offered in the United States and other importing countries, either by established agents or by salesmen who can show and explain samples and make prices and conditions in currency, weights, and measures that the purchaser can readily understand. If it be a machine, it should be sold by a man who can not only explain its working, but can set it up and put it into operation; if it be a tool or implement, it should be presented by a salesman who can show how it is to be used.

And in all cases, whatever the article offered or price demanded, absolute good faith is requisite; fair, honest dealing—the honesty that scorns to send abroad anything inferior in quality to the sample from which it was sold. For the lack of this sort of integrity, no mere cheapness in price will atone. Whatever market there may be in Germany for American manufactured merchandise can be conquered only by the best that our country can produce and retained by a strict fulfillment of every contract and obligation.

FRANK H. MASON,
Consul-General.

FRANKFORT, *July 22, 1897.*

FOREIGN COMMERCE OF HAMBURG.

I have the honor to transmit a statement of the export and import trade of the city of Hamburg (bullion and specie not included) during the years 1894, 1895, and 1896. This statement has been extracted from the Hamburgischen Correspondent of April 15, 1897.

I have no doubt that it will interest and surprise many of our people to see that the volume of business over this one port of Germany in 1896 equaled about 40 per cent of the entire export and import trade of the United States.

W. HENRY ROBERTSON,
Consul.

HAMBURG, *August 6, 1897.*

IMPORTS INTO HAMBURG (BY SEA).

Imports by articles.

Articles.	1894.	1895.	1896.
Food products	$124,455,198	$138,321,792	$141,405,082
Building materials and fuel	6,337,464	6,203,470	6,580,462
Raw materials and unfinished manufactures	208,553,212	213,029,754	220,343,256
Dry goods	12,553,786	15,152,032	15,370,040
Industrial products	20,821,668	22,713,530	24,011,820
Total	372,721,328	395,420,578	407,710,660

Imports by countries.

Countries of origin.	1894.	1895.	1896.
Europe.			
Prussia	$2,963,100	$3,530,730	$5,663,924
Bremen	5,289,074	4,783,324	5,879,314
Other German ports	52,186	198,730	403,886
Russia on the Baltic	1,283,703	2,415,938	4,993,716
Russia on the Black Sea and Sea of Azov	12,697,776	17,578,442	13,478,654
Sweden and Norway	6,912,234	8,689,856	8,311,436
Great Britain:			
Coal	4,859,246	4,543,896	4,942,070
Other goods	89,498,472	90,680,856	92,624,364
Netherlands	7,003,388	7,191,170	7,544,124
Belgium	4,100,264	4,725,728	4,685,982
France	12,412,176	13,002,178	11,464,698
Spain and Gibraltar	2,462,586	2,039,898	2,469,488
Portugal	3,097,570	3,461,472	3,330,572
Italy and Malta	3,585,946	4,161,192	4,414,186
Other European countries	7,351,106	6,097,084	9,338,406
Total	163,568,827	173,100,494	179,544,820

Imports by countries—Continued.

Countries of origin.	1894.	1895.	1896.
Non-European.			
United States	$47,114,718	$47,441,968	$55,468,518
Mexico	2,961,672	2,822,918	3,803,716
Guatemala	6,611,164	8,294,776	7,682,640
Other Central American countries	3,810,380	3,666,152	2,582,538
Haiti	3,205,384	4,524,142	2,493,764
Cuba	3,605,224	3,829,420	3,719,940
Other West Indies	4,611,012	3,612,840	5,302,402
Venezuela	6,596,646	4,713,352	4,838,064
Brazil	21,428,330	31,000,928	26,330,416
Argentine Republic	16,553,138	20,462,288	16,029,062
Uruguay	2,128,910	2,179,842	2,313,360
Chile	20,118,616	17,214,778	20,847,372
Peru	1,589,840	1,316,378	1,555,806
Bolivia	1,139,306	572,628	836,570
Ecuador	2,106,778	2,205,070	2,583,252
America, all other	3,131,604	2,233,868	3,567,382
Africa on the Atlantic	7,354,676	8,245,510	8,113,658
Cape Colony	1,899,716	1,926,848	2,627,758
Africa, all other	3,520,496	2,995,706	3,461,710
British East India	28,321,048	29,791,888	30,339,526
East India, all other, including the Archipelago	4,078,844	3,917,956	4,732,630
China	4,380,628	4,079,558	4,513,194
Japan	2,073,218	3,381,266	3,053,540
Other parts of Asia, all other	2,404,514	3,471,706	2,773,414
Australia and the islands	8,449,714	8,438,290	8,592,276
Total	209,195,556	222,340,076	228,162,518
Grand total direct imports by sea	372,764,383	395,440,570	407,707,338

EXPORTS FROM HAMBURG (BY SEA).

Exports by articles.

Articles.	1894.	1895.	1896.
Food products	$111,949,012	$106,806,308	$120,246,644
Building materials and fuel	2,100,112	2,786,980	2,682,260
Raw material and unfinished manufactures	68,660,144	77,131,040	77,612,990
Dry goods	40,606,608	46,904,326	49,291,942
Industrial products	65,755,830	85,103,802	92,697,668
Total	289,071,706	318,732,456	342,531,504

Exports by countries.

Countries of destination.	1894.	1895.	1896.
Europe.			
Prussia	$10,884,216	$12,251,764	$14,413,994
Bremen	11,524,912	10,352,762	11,622,730
Other German ports	85,204	398,412	593,810
Russia	6,427,666	6,833,694	10,208,260
Sweden	8,509,452	9,129,204	9,426,228
Norway	11,774,812	12,155,850	13,119,274

Exports by countries—Continued.

Countries of destination.	1894.	1895.	1896.
Europe—Continued.			
Denmark, with Iceland and Faröe Islands	$5,154,604	$5,289,312	$6,065,430
Great Britain	93,271,010	93,157,008	91,108,304
Netherlands	4,432,512	4,497,486	4,533,662
Belgium	3,021,648	3,511,690	3,701,614
France	3,258,934	3,680,432	3,654,728
Spain and Gibraltar	3,922,478	4,655,756	6,354,838
Portugal	2,309,314	2,580,872	2,782,458
Italy and Malta	2,522,562	2,222,920	2,483,292
Trieste	2,674,168	2,422,126	2,343,348
Other European countries	2,531,368	2,565,164	1,603,082
Total	172,304,860	175,704,452	184,105,052
Non-European.			
British North America	2,494,478	3,066,868	1,893,052
United States	28,765,156	32,295,172	44,192,792
Mexico	3,686,144	4,930,884	4,779,040
Guatemala	1,060,528	1,845,214	1,926,372
Other Central American countries	1,451,086	2,097,970	2,194,598
West Indies	4,177,614	3,252,270	2,733,133
Colombia	1,179,766	1,449,896	2,432,122
Venezuela	3,193,960	3,196,102	3,175,872
Brazil	21,056,574	26,495,588	21,010,878
Argentine Republic	6,360,550	8,025,836	12,109,440
Uruguay	2,327,878	2,164,848	2,562,308
Chile	5,708,192	9,114,448	9,610,916
Peru	1,199,996	1,393,490	2,133,908
America, all other	1,077,664	1,128,596	1,605,310
Africa on the Atlantic	4,649,806	4,585,546	4,897,326
Cape Colony	3,170,874	3,519,782	5,433,540
Africa, all other	3,243,702	3,847,508	4,576,978
British East India	5,190,304	7,487,242	7,315,644
Philippine Islands	867,510	931,294	825,622
East India, all other	2,174,606	2,135,812	2,653,224
China	5,249,566	9,523,094	5,454,008
Japan	4,318,986	5,421,164	7,490,336
Asia, all other	1,140,734	1,407,294	2,127,244
Australia and the islands	3,018,316	3,708,992	5,060,594
Total	116,763,990	143,024,910	158,187,652
Grand total exports by sea	289,068,850	318,729,362	342,292,704

EXPORTS FROM HAMBURG TO THE UNITED STATES.

I deem it proper to call the Department's attention to the fact that the declared-export statement of this consulate for the fiscal year just completed shows a total increase over the preceding year of $9,173,714.32, the total exports having reached the sum of $16,143,675.93, the largest amount in the existence of this consulate. This very considerable increase is largely due to the enormous shipments of sugar, the aggregate value of which was $10,227,599.91, as

against $3,004,825.88 for the year ended June 30, 1896. Besides sugar, the following articles show an appreciable increase:

Coffee (about)	$300,000
Gutta-percha paper	48,000
India rubber, crude	58,000
Portland cement	753,000
Rags	292,000
Raw hides and skins	123,000
Raw tobacco	538,000

The more extensive shipments of rags and raw tobacco are probably due to the fear of an increased tariff. There has been no material decrease in any article.

W. HENRY ROBERTSON,
Consul.

HAMBURG, *July 6, 1897.*

BICYCLES AND FOREIGN TRADE-MARKS IN GERMANY.

BICYCLES.

The wish of German manufacturers of cycles to stop the importation of American wheels has been the father of the following thought: At present bicycles are met with the same duty as other articles of "fine ironware," that is to say, they are classed as such and pay 24 marks on the 100 kilograms ($5.71 per 220.46 pounds), which produces a duty of from 3 to 4 marks (71 to 95 cents) on the wheel of average weight. On a valuation of an average wheel at $50, this duty is only from 1½ to 2 per cent. The suggestion has now been made that the customs authorities have merely to decree that bicycles come under the head of "vehicles," when the duty would be from 6 to 10 per cent of the value. Other authorities regard such action as impossible, because of the wording of the law, which makes only four exceptions to the rule of 24 marks per 100 kilograms on articles of "fine ironware," these four being guns, works of clocks and watches, sewing needles, and pens. It is held by them that a change of bicycles to the category of vehicles would be a violation of treaty. Their suggestion is a higher rate of duty on the materials of which bicycles are composed, especially iron and india-rubber tubing. These suggestions are not reported because they seem likely to be put into effect, but merely to keep the Department informed of the efforts which are being made by the manufacturers here to devise some method of shutting out American wheels. There can be no reasonable doubt that our wheels have attained and still hold a position of advantage in the minds of buyers in Germany. Whether

this superiority is to be preserved, is a question that concerns our makers at home. If they can guard against the shipping to Germany of any inferior wheels, they are sure to hold this market.

FOREIGN TRADE-MARKS.

With regard to the protection of trade-marks on American bicycles, I have the honor to report that very few cases of trade-marks taken out by Germans with intent to interfere with American sales of the bicycle thus marked have been brought to my attention during this year. I have no means of knowing if any exist, unless I am directly notified of the fact, since cases of this kind are very rarely mentioned by the press. But the entire status of trade-marks and patents is at present in a peculiar condition.

According to the lately issued law, the German Chancellor has the power to give or withhold a protection in Germany on trade-marks of foreign origin. He has the power of reciprocity toward foreign countries. If he publishes in the official organ a decree that the trade-marks of a given country are to be held inviolable, then, and not till then, can a German who uses a foreign trade-mark be held to answer before the court. When we consider the reason for the granting of this power, we see at once that it was given in order that the Chancellor should be able to demand some substantial return for the privilege. We may be certain, therefore, that it will not be extended to the United States without a privilege granted in return. Yet, under Article XVII of the consular convention with Germany (December 11, 1871), American citizens should enjoy in Germany the same protection—"with regard to patterns and marks of manufacture and trade"—as Germans.

INTERNATIONAL PROTECTION OF TRADE-MARKS, ETC.

In this connection I would like to call attention to a society of jurists, patent lawyers, industrials, and others, called International Association for the Protection of Industrial Property, which held its first congress recently in Brussels. Its president is Dr. Exner, of Vienna; its general secretary, Dr. Albert Osterrieth, of Berlin. Members were present from Austria, Belgium, Denmark, France, Germany, Great Britain, Hungary, Italy, Netherlands, Norway, Russia, Spain, and Switzerland. The only American member is Mr. Paul Oeker, of San Francisco. A second congress is to be held next October in Vienna and Budapest.

The object of this association is to promote the protection of inventions, trade-marks, industrial designs and models, trade names, etc., by studying and comparing the laws of different countries and suggesting uniformity in them. It appeals to manufacturers, in-

ventors, and others for membership and donations. Among the suggestions at the Brussels congress was one that may deserve consideration, namely, that some central city be selected, like Berne, in Switzerland, where a permanent bureau should be established. All trade-marks, designs, models, etc., registered there should be accepted as binding in all the countries belonging to the association or league. However difficult it might be to reach the point where the governments of various countries would agree to abide by the rules of this league, yet it can scarcely be denied that great advantages would result if some such system were in existence. It would avoid the great expenses and uncertainties that at present interfere with the protection of the rights of inventors and manufacturers in various parts of the world. English and American manufacturers have suffered grievously from the imitation of their trade-marks on the European continent, since the reputation of their wares has been injured when inferior goods have been sold as theirs.

I have the honor to inclose the rules, list of members, and proceedings at Brussels of the association in question,* without passing any judgment on the feasibility of the plans on which the gentlemen interested have resolved to work.

CHARLES DE KAY,
Consul-General.

BERLIN, *July 16, 1897.*

AGITATION IN GERMANY AGAINST AMERICAN BICYCLES.

A Hamburg paper, under the heading "The German bicycle industry," says:

No industry in recent years has developed so fast as the bicycle industry. In spite of this, it is very far from being fully developed. Since the bicycle grows to be more and more an article of necessity, manufacturers may expect larger business than was dreamed of in the beginning. The principal makers are the United States, England, and Germany. About ten years ago this industry, in Germany, took on very large dimensions. It has grown from a very modest beginning. It is an eloquent proof of the Empire's ability to nourish other branches, even after rotten limbs fall from the tree of trade. To-day it has 25,000 persons making wheels. They are made with as much skill and precision as marked the Empire's manufactures in sewing machines and guns. Their fame is so well founded that it has gone out into foreign parts. The fact that the first four months of this year saw 7,515 wheels and 1,200 double hundreds of bicycle parts shipped to foreign countries, to Switzerland, Austria-Hungary, Denmark, Australia, etc., proves this. In 1886, England had 68 bicycle factories; to-day she has 680. The development in the United States was so widespread and rapid that failures are reported as far from infrequent, and the surplus product is flooding free-trade England. In 1896,

* Filed in the Bureau of Foreign Commerce, Department of State.

the United States exported more than $4,000,000 of machines and parts. In 1885, the United States had only 6 factories, producing in a year 11,000 wheels; in 1890, there were 70, producing 40,000; in 1894, 125,000 wheels were made, and in 1896, 600,000. Now, in 1897, there are 800 to 900 factories, furnishing over 1,000,000 "bikes" every twelve months. The capital employed amounts to more than $100,000,000.

Before the beginning of this year, there was no official note of bicycle imports into Germany. In the first four months of 1897, we find that 7,536 wheels and 1,404 double hundreds of parts have been imported. Most of these came from England and the United States. A few come from France and Austria. Against these imports, the Empire's Industrial Union is up in arms. German duties on bicycles are low; rates in the United States are thirty times as high as the Empire's. In the face of such facts, an effort to have the duties increased is easy to understand. Dr. Miquel's remark that articles are too little specialized in Germany's tariff schedules in order to give bicycles a suitable position (Passende Position), etc., is construed into a willingness on the part of the Government to meet the manufacturers and to find a way out of the present difficult and dangerous position. The thing needed is a general increase of duties on wheels. The inland iron and steel makers would also be justified in asking for higher duties on imported parts of machines; for it is here that England and the United States are just now threatening to swamp German manufacturers.

"A syndicate or trust to control the manufacture of piping for bicycle frames" is reported. It is composed of English and American capitalists. It is said to have bought the Ellwood and Greenville works for $3,000,000. There are said to be only three frame pipe factories in the United States—those at Shelbyville, Toledo, and Brooklyn. Besides this, a rubber ring will be organized. The enormous consumption of rubber is sure to awaken the ambition of speculators to make such a combine. Against all of this it is time to take precautionary measures. We must make our people understand, also, that German wheels are just as good as those they get from England and the United States.

The correspondent of the Industrial Union urges that, in his opinion, "no trade treaty would be broken were Germany to tax bicycles under the title Fahrzeug,* which pay now from 6 to 10 per cent ad valorem, and may be taxed very much higher. Inasmuch as bicycles are not specifically mentioned in any of our trade treaties and are not specified in our tariff lists, they can easily be brought under this class of articles." The best thing for our manufacturers to do is to send over enormous quantities of parts before such action is taken. There is a big market here and all over Europe, for many years, for good wheels at fair prices. It will be a mistake if German tariff legislation is not anticipated (as our legislation has been by the Germans) by big shipments of goods against which the new laws are aimed.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *July 9, 1897.*

* The definition of which in the dictionaries is a vessel, boat, or craft, although from analogy the word may easily be made to mean any vehicle used for transportation.

BICYCLES IN BREMEN.

"The social-political significance of the bicycle" is a topic discussed in the annual report for 1896 by the supervising office of industry for Prussia, and it is now being taken up by the press.

The Bremer Nachrichten of this date says:

> The supervisor of industry for the district of Leignitz declares that the bicycle is being more and more used by the workingman to carry him to and from his place of work, and that it will surely tend to elevate both the moral and industrial character of the laboring class. The opportunity which the wheel offers will be taken advantage of, especially by that class of people who live on the outskirts of the larger cities and who may possess their own homes and gardens. These people, who spend the hours of the day in the workshops, will, thanks to the bicycle, be enabled to take a refreshing and exhilarating "spin" to their homes, and, being there, do work in the garden and field which usually fell to the lot of the women.

It is to be noted that many of the laboring people of Germany, by possessing their own homes and gardens and producing there a means of living for themselves, constitute an important factor in the problem of the industrial life of the Empire.

A large part of the laboring men of the city of Bremen own their own dwellings and gardens away from the city. The Government recognizes this condition, and supplies a "workingman's" train to convey them to and from their work at a cost not much more than the street-car fares.

The railroad is a Government concern. The working people who choose to live in this manner are either born on the premises or they come from the country districts, where they inherit a taste for that way of living. The working people who crowd the city and who must pay rent, from which they receive no product in return, demand and receive a higher wage rate than those who live in the country; but they live neither so happily nor so well.

The overseer of industry for the district of Hildesheim and Lünnenburg states that "a bicycle firm in Göttingen is making efforts to secure cheap and good houses for the laboring man" (primarily they are making an effort to create a demand for, and to secure the sale of, cheap bicycles). This firm proposes to supply wheels to the laborer at an especially low rate, and in case the laborer does not or can not use the wheel, it will be taken back at the price paid for it.

It is obvious that this proposed scheme is as enterprising as it is philanthropic. If the working people make the bicycle an article of use, it goes without saying that the demand for that class of wheel will be great. Without such demand, the German-made wheel will have difficulty in holding its own against the American product. It

appears that if the working people use the German bicycle, the "social" place for the wheel will be lost and the "élite" will use only the American make.

One year ago, the leading retail wheel concern in Bremen handled the "Weser" wheel entirely and had an American wheel as a curiosity sample. To-day, this house handles American wheels only.

GEO. KEENAN,

BREMEN, *July 10, 1897.* *Consul.*

DEMAND FOR INCREASED DUTIES ON BICYCLES IN FRANCE.

Recent reports from France say that a demand has been made to raise the duties on bicycles and automobiles—on the former, 600 francs per 100 kilograms ($115.58 per 220.46 pounds) on wheels and parts in the general tariff and 500 francs ($96.50) per 100 kilograms in the minimum tariff; on the automobiles or their parts, 250 francs ($48.25) in the general tariff and 210 francs ($40.53) in the minimum for vehicles under 200 kilograms, 150 to 180 francs ($28.95 to $34.74) for vehicles between 200 and 500 kilograms (440 to 1,102 pounds), 100 to 120 francs ($19.30 to $23.16) for vehicles weighing 500 to 2,000 kilograms (4,409 pounds), and 50 to 60 francs ($9.65 to $11.58) for those weighing upwards of 2,000 kilograms.

The motive for this is found in the fact that the rapid and successful development in France of this industry, its permanence, its needs, etc., have revealed certain defects in the present tariff system. American wheels are so much lighter, stronger, neater, and better that efforts to decry them in the press having failed, something must be done to keep them out. The claim is made that the rates when made were based on the average weight of wheels much greater than those that prevail now. They were 10 francs* ($1.93) per kilogram (2.2046 pounds), and wheels weighed 20 to 25 kilograms. This put a tax of 200 to 250 francs ($38 to $48) on each wheel. Mechanical skill has reduced the weight of wheels to 10 and 12 kilograms, hence the duties per bicycle are from 100 to 120 francs. High as are these rates, they are far from rendering French manufacturers secure against American, English, and German wheels; hence the move to increase the duties. One of the arguments used is that it is only fair to gauge the rates by the progress

* The French tariff, as published in April, 1896, by the International Tariffs Commission, Brussels, gives the following as the duties imposed upon bicycles: Velocipedes and parts thereof, including tires and pneumatic tubes for bicycle and tricycle wheels, etc., 250 francs ($48.25) per 100 kilograms (220.46 pounds), or about 1.14 francs (22 cents in United States currency) per kilogram (2.2046 pounds).

in construction, so as to make it harmonize with the basic principles of the whole tariff system. By adding the proposed rates, the duties on a 10 and 12 kilogram (23 and 26.4 pound) wheel will be 150 to 160 francs ($28 to $30) and 180 to 190 francs ($34 to $36), respectively. Of course, this means, practically, prohibition. I am not sure that any other would be a satisfactory solution.

If I may be permitted to give a word of advice here, I will repeat what can not be urged upon our manufacturers too often, and that is, go to South America, Australia, the East, Russia, etc., and get markets that will pay more in a month, by and by, than these ever will in years.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *July 16, 1897.*

AMERICAN CORN IN GERMANY.

The importation of American corn (maize) into Germany has this year reached an unprecedented figure. During the first four months of this year, no fewer than 346,027 tons of maize were imported from the United States into the German Empire, as against 175,516 tons and 28,794 tons, respectively, in the corresponding periods of the two preceding years. In April, the import amounted to 135,349 tons and in March to 99,222 tons, as against 61,115 and 42,115 tons in April and March, 1896, respectively.

There are, however, as it appears even from the reports of papers which do not uphold the principles of German "agrarianism," complaints about some of the maize imported from our country. It is asserted that large quantities of inferior and damaged maize has been received, and that many dealers have had unfortunate experiences with their purchases. This is said to have been the case particularly at Hamburg, where many contracts for maize had been made, and, as the buyers and sellers can not agree as to the degree of inferiority of the article in question, lawsuits are about to be instituted. I do not know how far the American shippers are to be blamed for these occurrences; it is, however, a fact that the maize often lies for weeks in absolutely unfit stores at the seaports, and this certainly does not conduce to the improvement of the article.

Attention has lately been drawn in the CONSULAR REPORTS to the fact that the German Government is endeavoring to further the interests of German agriculture, and, as a matter of fact, the efforts of the Agrarian party in Prussian and German legislatures are mainly directed toward impeding as much as possible the importation of foreign agricultural products. Proof of this is found in the obstacles

thrown in the way of importing American cattle and meat. The Agrarian press begins to advance the opinion that the importation of American maize of inferior quality might, in the end, endanger the German cattle stock. Whether such a claim could be verified—I think it could not—can not be discussed here. Our grain export firms should, however, in view of the hostile position of the Agrarian party, make a point of sending only a good article to the German market, for this is the only way in which they will be able to keep it.

This short report has been occasioned by various accounts which, as stated before, have appeared in the German press during the last few weeks. Inquiries made of merchants of this city connected with the trade have resulted in the discovery that the complaints are exaggerated, but not unfounded.

LOUIS STERN,
Commercial Agent.

BAMBERG, *July 2, 1897.*

DANISH COMPLAINTS AGAINST UNITED STATES CORN.

In view of the great efforts made during recent years to find and maintain a market in Europe for our annual crop of corn (maize), I fear that the wretched condition of at least half of the crop of 1896 which has been landed at this port has dealt a serious blow to our grain trade.

For some time back, I have been aware that corn in bad condition had been landed in Copenhagen, but attributed this bad condition to injury by the sea in the voyage across. Its repeated occurrence, however, the open and general complaints of the merchants, and the sudden and unenviable notoriety it has given at least two American ports appear to force the conviction that there is something radically wrong with the crop of 1896. The following statements are presented just as I have gathered them:

TERMS OF SALE.

It appears that this grain was sold under what is known in England as "tale-quale" terms, that is, that the shippers' weights and grades are final as to quantity and quality. If, therefore, at the landing port the grain is out of condition, there is, as I understand it, no redress to the purchaser, who must bear the loss alone. For the benefit or protection of the purchaser, the shipper's weights and grades are supported by the certificate of an inspector that they are as stated in the certificate. All the grain was shipped, as I am informed. as first-class, or No. 2, corn, and under certificate. If, there-

fore, the various cargoes arriving out of condition were not damaged by the sea (a contingency too remote for serious consideration and which is categorically denied) they should have reached the landing port in a condition equally good as at shipment, as was the case with the crop of 1895. On the contrary, out of a quantity variously estimated at from 175,000 to 200,000 quarters (1,400,000 to 1,600,000 bushels) competent judges declare that at least one-half arrived in a hot, moldy, or sour condition, the deterioration in quality varying from 15 to 50 per cent. Hence the Danish purchaser asks, Of what value is your inspector's certificate?

On May 24, in company with Mr. Charles T. Ballard, of Louisville, Ky., I inspected this damaged corn, mostly stored in the free port. Mr. Ballard is not a corn merchant, being the proprietor of a flour mill; but having served on the grain committee of the Louisville Board of Trade, he understands the different grades of corn. At my request, he made an inspection and gave me his opinion as to its condition. His name and views are here quoted with his knowledge and consent. He says:

> There was no corn which was strictly first-class, or No. 2. There was a considerable portion merchantable, or No. 3, but the greater part of that which the official pointed out to us he thought should properly be classed as below No. 3, or no grade.

For myself, I will add that the great bulk of it showed signs of having once been hot; some of it was still hot, and again some was moldy and sour.

The farmers refusing to buy any but grain in first-class condition (or as near that condition as can be had) the warehouses have become choked and the corn is stored in railway cars on side tracks, in barges in the docks, in sheds hastily constructed on the quays, and even on the open quay, where it is exposed to further injury from every passing shower. In addition, there is said to be now on the way from Atlantic ports six steamers carrying collectively 48,000 quarters (384,000 bushels).

THE PORTS INVOLVED.

With the exception of New York, every port shipping corn to Denmark is involved more or less in the charge of sending bad grain to Denmark. Philadelphia has a little bad corn charged against her. Baltimore, Newport News, and Norfolk, have each sent considerable quantities in bad condition; but the principal offenders are New Orleans and Galveston. One firm informs me that, with the exception of grain arriving in December, they have not had a single cargo delivered in good condition from either New Orleans or Galveston. This firm is the largest importer, and consequently the

heaviest loser. Another firm informs me that they have "lost confidence as to New Orleans and Galveston." I am sorry that I must state that there is a strong undercurrent of suspicion that the inspectors have not done their duty. It is charged that the grades at certain ports are not high enough, and that corn graded as No. 2 at New Orleans, for instance, would grade below No. 2 in New York. It is also complained that the inspectors are not responsible for the certificates they issue, nor can the merchant here tell whether they are appointed by the shippers themselves as a mercantile body, by the municipalities, or by the States. There seems to be no general law governing their appointment or controlling their acts.

CAUSE OF DETERIORATION SUGGESTED.

Mr. Ballard has suggested what may prove to be the true cause and explanation of the condition of the grain arriving here. He says he has been informed by a prominent official of the Illinois Central Railroad that "the corn crop of Nebraska, Kansas, and Texas was harvested in bad condition at gathering time, owing to damp weather; and this view would seem to be strengthened by the fact that the no grade and inferior corn arriving has been mostly shipped from New Orleans and Galveston, ports which largely draw their supplies from these three states."

The same conditions have never occurred before in the twenty years American corn has been shipped to Denmark. An occasional cargo would arrive in a damaged state, but no such general spoiling of the grain has ever happened before. As a consequence, the loss has been heavy—estimated easily at 1,000,000 kroners ($373,000)—and, as I am informed, at least one failure is threatened. It is also said that there is the same trouble with corn in London, Antwerp, Bremen, and Amsterdam, but of these places I have no definite information.

PROBABLE TERMS OF FUTURE PURCHASES.

It is a most unfortunate occurrence when our corn exports have been making such rapid strides of late, and especially in Scandinavia, where corn as a cheap cattle food has played such a prominent rôle. One of the almost certain consequences will be, that in future transactions "rye terms," or condition guarantied at the port of delivery, will be demanded; for confidence has received a shock which will take both time and fair treatment to obliterate.

ROBERT J. KIRK,
Consul.

COPENHAGEN, *June 1, 1897.*

UNITED STATES FLOUR IN GERMANY.

The Cologne Gazette of the 12th instant contained an article on the alleged adulteration of American wheat flour by the admixture of maize flour, of which I inclose a translation:

AMERICAN FLOUR.

According to official statistics of the imports of flour into Germany, America takes the third place; in 1896, 6,168 tons were received from America, and from Jauuary to May, 1897, 1,622 tons. The quantity is thus sufficient to warrant our taking an interest in certain transactions which are now being discussed in the country where they are taking place. The adulteration of wheat flour with maize flour appears to have attained such proportions in America that honest men find it difficult to contend against this "unfair competition." No. 25 of the Weekly Northwestern Miller, of June 18, contains a copy of a report made by Mr. F. E. Kauffmann, a mill owner of St. Louis, to the National Union of American Millers, as well as to the winter wheat millers of the Southwest, upon this matter, which throws a light upon these manipulations. The substance of the report is to the following effect: The high price of wheat, together with the low price of maize, have caused enormous quantities of a mixture of wheat flour with maize flour to be thrown on the market. At first, this was only done by a few unscrupulous millers, but later on the custom spread to such a degree that large numbers of millers were compelled, quite against their inclination, to adopt this practice or have their mills stand idle. At times, the price of maize even regulated the price of wheat flour. The mixture was always brought on the market as pure wheat flour, and frequently, indeed, with the ordinary mill marks; it was of a good color, and could only be detected by an expert when the bread or biscuit was hot from the oven. The price which the buyer had to pay thus never corresponded to the real value. Mr. Kauffmann points out the dangers to which the American trade will be exposed unless the millers resolutely strive against such practices. He warns them that foreign countries will vigorously resist the importation of this adulterated stuff; he laments the demoralization which will inevitably follow should the practice still further increase, and, with difficulty, finds words severe enough to characterize such a dangerous custom. In point of fact, the custom must already be widely spread, when those in America interested in the trade speak thus publicly about it; and, from Mr. Kauffmann's utterances, it is evident that this inferior mixture is exported. How many hundreds of tons may there not already have been in the quantities imported from America as wheat meal! In any case, it is our duty to look well to it that our people are not deceived by this mixture and that our millers are not ruined by the low prices asked by Americans. The situation is becoming more critical, involving, on the one hand, the competition of French millers by the unfair means of a disguised bounty; on the other, this fraudulent manipulation by a number of Americans, which threatens our millers with the loss of the markets at home and abroad.

WILLIAM H. MADDEN,
Vice and Acting Consul.

COLOGNE, *July 17, 1897.*

THE CONTINENTAL CHANNEL PORTS.

The Temps, of Paris, recently published an interesting article from the pen of Mr. Georges Villain on the development and present condition of the great continental ports situated on the English Channel, giving especial attention to Calais, Boulogne, and Ostend. A brief review of these statements may be of value:

Thirty-five years ago, the number of travelers between England and the Continent in both directions was 249,322. Almost all passed through the French ports of Calais, Boulogne, Dieppe, and Havre. Ostend, the only continental port outside France and which was only entering on this trade, counted only 5,119 travelers. Boulogne led, with 113,425; then came Calais, with 75,177; Dieppe, with 41,605; and Havre, with 13,996 passengers.

To-day the number of individuals has almost tripled. Last year the figures were 820,500 travelers, not including the large number of one-day excursionists who came from England to pass only a few hours on the Continent. The share of the French ports, although still very important, amounts to not more than two-thirds of the total; for, with Ostend are now to be reckoned the Dutch ports of Flushing and the Hook of Holland, the last mentioned at the mouth of the Meuse. Last year Ostend counted 118,600 travelers. Flushing began in 1875 with 5,000 passengers; in 1896, there were 81,316, an increase of 12,000 over the preceding year. Finally, the Hook of Holland, which counted only 36,300 travelers in 1890, last year had more than 73,000.

The topographical situation of the Dutch ports does not permit them to become serious competitors of the French, but as regards Ostend the situation is different, as shown by the efforts to popularize the Belgian railways and lead travelers over routes lying outside French territory. This competition is serious; especially has it become so during the past eight years. In 1889, Ostend scarcely counted 50,000 travelers; its traffic has therefore more than doubled in seven years. This fact is in a great measure due to the increased speed of its mail-packet service. In other days, with an average of 10 to 12 knots, the trip was made from Calais to Dover in two hours and from Ostend to Dover in six hours. The French port then had the advantage of four hours on the sea passage, which is considerable. Now, with the speed of 20 knots, the difference has decreased one-half. The passage from Dover to Calais is only one hour and twenty minutes, but that from Dover to Ostend has fallen to three hours and a quarter. The English, never afraid of the sea, are

more inclined to go via Ostend to the principal cities of Europe, as there is great comfort on the boats; the direct railway connections are excellent, through express trains are numerous, and the expense is less than by some other routes.

Some figures in this connection may not be useless. Take, for example, the journey from London to Vienna, which may be made by four different routes—Ostend–Cologne, Calais–Brussels, Calais–Chalons sur Marne, or Calais–Paris. The first costs $37 and requires twenty-nine and one-half hours; there is no change en route, and the customs examination is made on the train. The expense of the second route is only $39.44 and the sea journey is two hours shorter; but a change of train must be made at Brussels, with the risk of missing connections. The total time required for the journey is thirty and one-half hours. The Calais–Chalons route involves an expense of $43.98 and annoying changes en route; the total time is thirty hours fifty-two minutes. Finally, the fourth route, by Calais and Paris, much more expensive and longer than the others, costs $47.83 and requires thirty-two hours fifty-two minutes.

Evidently this competition can not fail to be very burdensome. The operating of the Ostend–Dover sea service is far from profitable. The deficit in the operating expenses for the period 1887–1895 amounted to $1,745,106, which is equivalent to an average annual loss of $193,000; and, when it is considered that in these figures are included neither the interest nor the funding of a capital exceeding $4,000,000, it is easily seen under what "economic" conditions the Ostend–Dover sea service is carried on and in what a comparatively inferior situation the French sea lines are placed.

Nor is this all; not only is the Belgian line striving to divert the stream of travelers, but it has also just recently completed, by a rapid service between Ostend and Tilbury (London), a direct freight line from London to central Europe and vice versa. Negotiations have been concluded between the Belgian State Railway and its eastern and southern connections to forward, via the former's sea service, freight and express goods coming from Italy by the St. Gothard Tunnel route. It can easily be imagined what a disastrous competition is thus occasioned to the French lines, especially those forming the Boulogne–Folkestone channel service.

Calais, for its travelers, and Boulogne, for its travelers and freight, are thus directly affected by the efforts which Ostend is making to seize the transit business. Meanwhile, from such ingenious arrangements with the Belgian system, the shippers of Italy and central Europe are reaping rich rewards.

Great efforts are being made by the French Government to maintain the ascendency of its ports and to recover some proportion of

their lost trade. Belgium, on the other hand, is putting forth all possible endeavors, by improvement of its harbors, enlargement of its boats, and reduction of cost of the various services, to still further increase its share of travel and freight. Under these conditions the traveling public can not fail to be greatly benefited.

HENRY C. MORRIS,
Consul.

GHENT, *July 20, 1897.*

GERMAN AGRICULTURAL MACHINERY IN RUSSIA.

In view of the present negotiations at St. Petersburg about the reduction of duty on agricultural machinery or the iron requisite therefor, the following particulars, based on official Russian statistics, are of special interest:

There are in Russia, at the present time, 193 factories producing agricultural machinery and implements to the value of 9,600,000 rubles (the gold ruble=77.2 cents; the silver ruble, on January 1, 1897=37.9 cents), while in 1896 the value of the imports in said articles amounted to 5,800,000 rubles.

Last year, Germany was responsible for nearly one-half of the total imports, for, of the 882,000 poods (31,850,764 pounds) of agricultural machines imported, 432,080 poods came from Germany. The United States supplied 223,726 poods (8,079,193 pounds); England, 120,435 poods (4,349,148 pounds); Austria-Hungary, 85,526 poods (3,088,312 pounds). The importation from Germany increased even in the year of the customs war (1893), rising from 288,684 poods in 1892 to 379,428 poods in 1893. In 1894, it amounted to 379,769 poods (13,714,217 pounds). This increase was made at the expense of the English exports, which rose, in 1893, to 314,908 poods (from 181,880 poods in 1892) and to 383,160 poods (13,836,673 pounds) in 1894, but which fell to 225,533 poods in 1895, and even to 120,435 poods in 1896.

German exporters seem, it is true, to have made great sacrifices in order to win the Russian market. A memorandum issued by experts of the Russian Ministry of Finance shows that German manufacturers of agricultural machines and implements frequently sell their products at a very low price in Russia. For instance, the Eckert plow, which, in Germany, is sold for 37.66 rubles (81 marks*) at the factory, is retailed at Charkov for 41 rubles, and for quantities sold to depots of agricultural districts, agricultural societies, etc., a discount of no less than 10 per cent is allowed. In this case, the Russian agent sells the Eckert plow, costing in Germany 37.66

*$19.27.

rubles, for 36.90 rubles. If it is considered that out of this amount 4.62 rubles have to be paid for freight, 5.46 rubles for duty, and that there are further expenses for storage, commissions, etc., the extent of the sacrifices made for the Russian trade by the Eckert plow works may be estimated.

This short report is meant to demonstrate to American manufacturers what efforts their German competitors are making to conquer foreign markets.

LOUIS STERN,
Commercial Agent.

BAMBERG, *July 6, 1897.*

FARMING MACHINERY IN RUSSIA.

Russian agriculturists make frequent appeals to their Government, pointing out the difficulties which prevent their success in the world's market. They say that the decrease in the price of grain so affects their income that they are obliged to reduce the expenses of production of agricultural products, and they claim that the only remedy is the use of agricultural machinery. The scarcity of labor in harvest time often causes great loss, and they feel sure that the use of machinery and implements would increase the productiveness and improve agriculture in all respects. Machinery would be widely employed in Russia if it were not for its cost, which places it beyond the reach of the average farmer.

The principal cause of the high price of agricultural machinery and implements is the excessive customs duty. It is claimed that the import duty increases the cost from 18 to 20 per cent on harvesters, 20 to 25 per cent on thrashers, 20 to 35 per cent on plows, straw cutters, etc., 40 to 45 per cent on steam engines, and 35 to 50 per cent on parts of agricultural machinery. The duty on agricultural machinery and implements, not provided with steam motors, is 52 copecks in gold (40 cents) per pood (36.112 pounds); on portable engines, with thrashers, 1.40 rubles ($1.08) per pood.

Notwithstanding the fact that the duty on farming machinery was made to protect the home production, its object was not attained, and the manufacture of agricultural machinery in Russia has not developed. It can not satisfy the local demand. Lately the Minister of Finance concluded that something should be done for the farming community, and proposed that machinery not manufactured in Russia, such as harvesters, self-binders, etc., should be admitted free of duty. The minister ordered that a meeting be called, consisting of one representative of the Ministry of Finance, one of the Agricultural Department, thirty-three landowners appointed by the Minis-

try of Agriculture, and also of representatives of manufacturers of machinery and iron works. The director of trade and manufacture was to be president, and the meeting should consider whether the action suggested by the Minister would help the Russian farmers, and should make suggestions to benefit the agriculturists. The meeting concluded its work on the 19th of June, 1897. The machine manufacturers and iron producers differed in opinion from the agriculturists, and two different recommendations were submitted to the Minister of Finance.

The representatives of agriculture proposed in their report that import duty should be removed from the following articles: (1) Self-binders; (2) twine for self-binders; (3) steam plows without engines; (4) pulverizers for sprinkling fruit trees and boughs; (5) steam thrashers, locomotives with beater drums (not less than 4½ feet wide), and pike drums (not less than 40 inches wide), and parts thereof; (6) combined clover thrashers with two drums; (7) hay rakes; (8) sorting machines with spiral wire cylinders; (9) sorting machines for potatoes; (10) centrifugal milk separators and their parts; (11) machines for plaiting straw mats; (12) fingers for horse-rakes; (13) beater plates for thrashers; (14) horse steel shovels; (15) cloth for self-binders aud sorting machines; (16) hand and horse-power machines (not more than 4 horsepower) for making brick, tiles, and turf, according to certificates issued to farmers from competent establishments; (17) machines for scattering manure; (18) engines for agricultural purposes, according to certificates from competent Government or public establishments; (19) machines for cleaning fruit and vegetables; (20) cockle separators and machines for cleaning clover; (21) horse rakes.

It was further proposed that the duty should be reduced to 50 copecks (38.6 cents) per pood on the following articles: (1) Reserve parts of agricultural machines and instruments, imported together with whole instruments and machines or separately; (2) kerosene motors, according to certificates issued by competent Government or public establishments; (3) apparatus for boiling food; (4) apparatus for boiling fodder; (5) apparatus for cooling milk.

The representatives of machine manufacturers recommended in their report:

(1) That measures should be taken to obtain cheap raw material for the construction of agricultural machinery; (2) that the Government should appoint a commission, consisting of representatives of the zemstvos, farmers, machine manufacturers, and officers of the Government Bank, to evolve measures to satisfy both the agriculturists and the machine manufacturers; (3) that the present duty on agricultural machinery should not be changed, as its reduction during

present conditions would put a premium on foreign machinery and would be a final blow to the home manufacture; (4) that the existing duty on reserve and compound parts of agricultural machines should be reduced to 50 copecks gold (38.6 cents); (5) that a premium be granted on exports of agricultural machinery of home production to the amount of the existing import duty; (6) that a minimum term be fixed during which the amount of the customs duty on agricultural machinery shall not be changed, since foreign producers, owing to commercial treaties, profit by a more stable customs tariff than the Russian industry; (7) the regulation of transport tariffs for agricultural machinery, which now favor the foreign rather than the home producers; (8) that rights and privileges be granted students who have completed the practical course of studies of the manufacture of agricultural machinery; (9) in case the customs duties change, that the new ones take effect at the end of the manufacturing season, in the month of November; (10) that the duty collected on agricultural machinery imported from abroad be used to aid the Russian farming and machine-making industries by the establishment and maintenance in each government of the agricultural region of trade schools (for the instruction of locksmiths, founders, mounters, and machinists) and for giving premiums to manufacturers who first undertake the construction of new agricultural machines and attain satisfactory results.

In the beginning of the sixties, the attention of the Government was drawn to the necessities of the Russian farming industry, and it took measures to develop the construction of farming machines and implements in Russia by aiding certain mechanical works, by giving subsidies, and allowing such factories to receive iron and pig iron duty free; it concurred in the organization of depots, and founded, in 1865, the Imperial Farming Museum in St. Petersburg, which is in a flourishing condition. New samples were imported and distributed, exhibitions arranged, and special efforts made to encourage the industry.

According to statistical information, the present total income of the duty collected on farming machinery amounts only to 450,000 rubles ($347,400) per annum, and the chief of the statistical section of the department of customs duties thought that the reduction of duties on machinery demanded by the agriculturists would entail so small a loss to the Government that it would not be felt. The statistics show further that the annual import of farming machinery and implements into Russia amounts to 5,000,000 rubles* ($2,570,000)

* The duty values are estimated in gold rubles (77.2 cents) and the other values in paper rubles (51.4 cents). The "paper ruble"—officially called "credit ruble"—is the actual currency in Russia and that in which all general business and other commercial values are estimated.

and the home production to 9,000,000 rubles ($4,626,000). In European Russia, there are about 100,000,000 dessiatines (269,970,000 acres) of cultivated land, so that about 15 copecks (7.7 cents), it is calculated, is spent annually per each dessiatine (2.6997 acres) for agricultural machinery.

The manufacture of farm machinery in Russia developed earlier in the Baltic and Vistula governments than in the other parts of the Empire; but, during the last fifteen years, conditions have changed. The mining industry has developed greatly in southern Russia, especially in iron and pit coal. New factories were established there, new mines explored, and the center of the iron industry was transferred to southern Russia. The agricultural-machine industry developed in that region in proportion. Progress was marked in the three southern governments of Ekaterinoslav, Tauride, and Kherson. The Moscow, Kharkov, Don, Riazan, Tula, and other governments followed. In the old centers of machine manufacture—Warsaw and Livonia governments—there has been but little progress.

The number of plows, reapers, and thrashing machines manufactured in Russia in the year 1895 was: Plows, 75,546; reapers, 26,980; and thrashing machines, 3,561. Agents of the Austrian manufacturers have been working hard to introduce their scythes in Russia, and according to statistics, Russia imported during 1896 over the European frontier 208,000 poods (3,756 tons) of scythes and sickles, to the value of 1,807,000 rubles ($928,798), which came principally from Austria. The sickles represent from 1 to 2 per cent of that amount, so that about 200,000 poods of scythes alone were imported, and as a pood contains about thirty scythes of the larger size, the total number imported was about six million, which is three times larger than the number of scythes manufactured in Russia in 1896.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *July 3, 1897.*

AGRICULTURE IN RUSSIA: OPENING FOR UNITED STATES MACHINERY.

I have the honor to report that a very important meeting of the presidents of the various agricultural societies in Russia, together with numerous other persons representing large agricultural interests, has recently been sitting at St. Petersburg under the presidency of the Russian Minister of Agriculture. The labors of this meeting were brought to a close during the present week, and I have been verbally informed of the more important results of the meeting.

The condition of the agricultural interests in Russia has been the

source of great anxiety for many years to the Imperial Government. Numerous measures having for their object the amelioration of the condition of the farming population have been tried; "land banks" have been established for the nobility, or great landowners, and separate banks have been inaugurated to supply money to the peasant class of farmers; land values have been from time to time increased and every increase in value has resulted in an application for an increase in the amount of the mortgage. Until the present time, this application has usually met with a favorable response, but the banks (which are really governmental) have at length reached a point where they must stop. If ever the idea existed that these loans were of a temporary character and would be repaid, it has disappeared. The Government being the creditor, there is a marked disinclination to foreclose mortgages—even those on which the interest has remained unpaid for years. In a few cases, where foreclosure has taken place, the property has changed hands, but in the majority of cases the proprietor has been placed in charge as caretaker, and he manages the estate, sells the crops, is paid for his services, and is probably better off financially than he was before the foreclosure. To evict and take possession of the mortgaged estates in Russia, would be beyond the power of the Imperial Government, as it would simply mean taking possession of two-thirds of the landed estates of European Russia.

In order to enable all classes of the farming population to obtain the greatest return for the results of their labor and the fruits of their industry, the Government has been advancing money on grain in the stack and on grain in the warehouse and has charged the low rate of 2 per cent per annum. This plan, after four years' trial, can not be said to have been a success, simply because the people whom it was intended to benefit have not profited by it on account of the expense incident to obtaining the loan. This expense, in the case of a small farmer, was a serious drawback to the scheme, and was caused by the conditions attached to granting the advance, connected with the visits of the officials who were designated to place safeguards over the property, etc.

Farmers who purchased agricultural machines of Russian make could, if they so desired, obtain a loan at the Government Bank on such machinery at a low rate of interest. This was done to tempt the farmer into purchasing a homemade and probably inferior article and thereby benefiting the Russian manufacturer. For some reason, this scheme did not prove successful, and the banks were generally the losers. A different plan has since been adopted and is now in force. This plan reverses the previous order of things, and instead of loaning the farmer money on his Russian-made machine, the money

is loaned to the maker of the machine; in other words, to the manufacturer. Whether the manufacturer will be any more successful in collecting his debt from the farmer than the banks were remains to be seen.

The change inaugurated about two years ago in the currency of Russia, from a silver to what is supposed to be a gold basis, has had a somewhat depressing effect on the mind of the peasant farmer. By imperial edict, it was made known that a 5-ruble gold piece would, until further notice, be equal to 7.50 rubles paper currency, and a check drawn on any Russian bank for 75 rubles must be considered paid should the holder receive 50 rubles in gold.

The masses of Russia are said to be uneducated and ignorant; nevertheless, when they were offered a 5-ruble gold piece in payment of a debt due them for 7.50 rubles, they refused to accept it, and pointed out that stamped on this gold piece in plain Russian characters were the words 5 rubles, and they furthermore demanded to know why it was that they were expected to believe that twice two and a half made 7.50 rubles in money or anything else. The Government was equal to the emergency; it recoined the same 5-ruble gold piece and stamped on it 7.50 rubles.

The meeting of agriculturists and those who are interested in agriculture, which has just finished its sessions at St. Petersburg, was called for the purpose of discussing and recommending to the Imperial Government measures to improve the condition of agriculture and agriculturists. One measure which will be of great interest to our agricultural machine and implement manufacturers was, after full discussion, favorably recommended to the consideration of the Russian Government, viz, that harvesters, binders, mowers, plows, and thrashers be admitted into Russia free of duty. It was recommended, also, that thrashing engines be admitted free when they are to be devoted exclusively to farming purposes and proof of this purpose is furnished.

The principal reason advanced for this action on the part of the meeting was the fact that none of the items enumerated are manufactured in Russia—at least not on a sufficiently large scale to be taken into consideration.

The duty on a harvester and binder is at present about $33. The duty on a thrashing outfit (including the engine) is $450. The duty is estimated by weight. On the thrasher, it is 38½ cents for 36 pounds; on the engine, 92½ cents for 36 pounds, provided the engine and thrasher are imported together; otherwise the duty on the engine will be $1.24 for 36 pounds. The duty on a traction engine is $2 for 36 pounds.

Should the Russian Government favor this scheme (and there is

good reason for believing that it will do so) great relief will be granted the agricultural interests. I am informed that, in all probability, on and after January 1, 1898, the machines and implements mentioned will be permitted to enter Russia free of duty.

In harvesters and binders, the American manufacturer already holds the field and is not likely to be ousted, though he must be prepared to meet strong competition from Germany. The Russians are afraid of our thrashing outfits. They say that both thrasher and engine are much too lightly constructed for the use and abuse to which they will be subjected in a country like Russia. It is impossible to make them understand that to be strong does not necessarily mean to look heavy, and it is to be feared that if we could not compete successfully with the heavy English thrashing machine and engine when they paid a duty on weight, we are not likely to do so when that duty is taken off.

The duty on plows has for many years prevented their introduction into Russia in large numbers. This duty was purposely made high in order to enable the Russian manufacturer to supply the market with plows at a reasonable price. The Russian-made plow is an inferior article and costs almost as much as the imported plow, so that the only persons who have benefited by the high duty were the manufacturers. Our American-made plows will easily capture the Russian trade if our manufacturers are sufficiently active and are early in the market. It is desirable that they should be advised at an early date that so enormous a field as Russia is about to be opened to free competition in plows. In harvesters, binders, mowers, reapers, hay rakes, etc., we are already in a position to almost defy competition in Russia, and with the duty taken from plows there is no reason why a similar condition should not exist.

The information which I have received, and which I regard as reliable, indicates that the articles I have enumerated will shortly be placed on the free list, and, believing this to be true, I feel it my duty to so inform the Department.

THOS. E. HEENAN,

ODESSA, *June 15, 1897.* *Consul.*

EUROPEAN FRUIT-CROP OUTLOOK.

Through the courtesy of some of our consular officers in Germany, France, Italy, Austria-Hungary, and Spain, and also from other reliable sources, I have gathered some information regarding the outlook for the incoming European fruit crop. I will confine my report, however, to fruits with which American fruit growers have to compete in the home as well as in the foreign market.

The months of March and April were exceptionally fine and warm throughout Europe, thus causing vegetation and trees to start earlier than usual. Then came May and the first part of June, bringing late frosts, rain, and damp, cold weather. This materially injured the fruit blossoms. The predictions are that the fruit crop will be generally very small and the quality inferior. In central and northern Europe, caterpillars have infested the apple and plum trees, and in the localities thus affected the apple crop is almost entirely lost. In southern Spain, an unusually dry season has prevailed, thus causing great damage to the raisin, olive, almond, and walnut crops. Lack of moisture, together with a prevailing dry wind, will prevent raisins, grapes, olives, and nuts from developing, so that crops will be small and quality undesirable. In France, the prune crop, as well as the wine grapes, have been injured by frosts. In the Grenoble district, severe storms have injured walnuts, so that, all in all, the outlook this season is discouraging for European fruit growers.

There will be a good chance to place American dried fruits, as well as green apples, in Europe this season, provided our growers will put up choice stock only. They must keep small, inferior fruits at home. Transportation and other charges being high, it will not pay to ship anything but the very best. Nothing smaller than 80s in French prunes will pay to ship to Europe, and all other dried fruits, as apricots, peaches, and pears, must be of uniform size, bright, and packed in attractive manner.

So much has already been said on this subject that I shall not reiterate, but simply summarize the situation as reported to me. The estimates at hand are about as follows: Walnuts, 50 per cent short of last crop; almonds, 25 per cent short of last crop; French prunes, 75 per cent short of last crop; apricots, peaches, raisins, and wine grapes, 50 per cent short of last crop; olives, 33 per cent short of last crop; apples, 50 per cent short of last crop, and in some localities they are an entire failure. Pears have done better and the crop in some localities will be fair; still there will be a good European market for choice American pears, both green and dried, if landed in good order for reshipment to the interier.

EUGENE GERMAIN,

ZURICH, *July 14, 1897.* *Consul.*

SUPPLEMENTARY REPORT.

The following modifies my former report on walnuts somewhat, but only as far as Grenobles are concerned, and confirms the same as to the qualities of Spanish raisins.

Walnuts.—Our consul at Grenoble, under recent date, informs me that the prospects for the walnut crop are better than anticipated,

that the trees have recuperated, are in fine condition, and that the yield will, as it now looks, nearly equal that of last year.

Malaga raisins.—I am in receipt of a communication from Malaga, Spain, in which my correspondent writes as follows:

In reply to your inquiry of May 20, which I should have answered ere this, I beg to inform you that at the beginning of the season the outlook for a bountiful crop of malaga raisins was very favorable and a much heavier yield than that of last year was looked for. But the continued drought prevalent in the raisin-growing districts of Spain, together with the exceedingly high and dry temperature, has injured the growth and development of the raisin berries. This district, in particular, is affected to such an extent that the output will be only equal to that of last year, namely, 650,000 boxes of 10 kilograms (22 pounds) net each, or 14,300,000 pounds.

From the above, it will be seen that while the quantity of malaga raisins will equal that of last season, fancy grades will be scarce in Spain, and our California raisin growers will have a good opportunity to sell their fancy clusters and first-class London layers at advantageous figures in our home markets.

EUGENE GERMAIN,

ZURICH, *August 2, 1897.* *Consul.*

PROPOSED ASIATIC COMMERCIAL MUSEUM AT SAN FRANCISCO.

The commercial situation in the far East, or Asiatic Pacific, is now so critical, so far as American interests are concerned, and the opportunity for the development and advancement of such interests is so great, if this critical period is successfully passed, that I feel it my duty to make a proposition which I trust the exporters and manufacturers of the United States in general, and of the Pacific Coast n particular, will carefully consider.

What I propose is something practical and tangible; it does not require extensive legislation, it can be accomplished without prolonged delay or large expenditure of money, and it is in such a form that its promoters and supporters can see what is actually done.

It is the establishment of an Asiatic commercial museum or bureau in San Francisco on lines similar to those of the Philadelphia Museums (which are already doing much good, especially in aiding American trade with South America), for the special purpose of bringing the immense markets of the Asian Pacific into closer touch with those of the United States and providing our manufacturers and exporters with ready and accessible means of securing all kinds of information relative to the markets of the far East.

There is a woeful lack of accurate knowledge in the United States about this great field of trade opportunities, which reaches from Batavia, in Java, to Vladivostock, in Pacific Siberia, and covers a coast line of nearly 4,000 miles. It represents a population of 500,000,000, has already a foreign trade of nearly $1,000,000,000, possesses ten times the shipping of our own Pacific coast and boasts of several ports whose respective populations exceed those of our Atlantic cities, with the possible exception of New York, and where the number of vessels entering and clearing exceeds that of any Atlantic port exclusive of New York.

While the United States ministers and consuls are doing all in their power, through official reports and replies to individual letters, to make the demands and characteristics of these Asiatic markets well known, the practical assistance of a commercial museum, bureau, exhibit, or whatever name is fit, is required. Here can be placed useful and representative exhibits of (1) what Japan, China, Korea, eastern Siberia, Manchuria, Formosa, Indo-China, Siam, Straits Settlements, Java, Borneo, and Philippines are now importing, including (2) prices at which products are sold to the consumer by the retailer, to the retailer by the wholesaler, and to the wholesaler by the exporting firms of Europe and other lands; (3) amount imported of each class of goods, how packed, and how placed on the market; (4) characteristics and features of the local market, conditions of demand and supply; (5) different specific qualities and classes of goods as well as the general line; (6) methods of doing business, remitting payments, negotiating exchange; (7) customs charges or duties and other Government taxes or rules governing trade; (8) names of reliable firms handling each kind of imports; (9) names of banking houses; (10) names of steamship companies running to the port, American connections, freight rates; (11) and, finally, any other data that might be of use to the American exporter. The above subdivisions I have made not only from questions asked by hundreds of letters received from the United States, but from discussions with local firms in different ports of the far East.

These exhibits should be samples which could be readily obtained and shipped to the museum or bureau at San Francisco. When too cumbersome or expensive, photographs could be made at small cost. The main object of these samples is to show exactly what competition must be met in quality and style. A study of these, with the data as to prices, etc., will speedily provide the exporter with sufficient information to determine whether he can enter the field or not. They could be renewed and added to as occasion demanded, when the managers of the museum might think best, or as learned from their correspondence with consuls, chambers of commerce, or special agents.

The expense of securing these exhibits or samples need not be great. A few hundred dollars for each port, or a total of $25,000 for the leading markets of Yokohama and Kobé, in Japan; Vladivostock, in eastern Siberia; Chemulpo, in Korea; Niuchwang, Tientsin, Shanghai, Hankow, and Canton, in China; Hongkong and Singapore, British colonies; Saigon, in Indo-China; Bangkok, in Siam; Batavia, in Java; and Manila, in the Philippines, would suffice to equip the museum admirably. This would be the first or opening cost; the expense of maintenance each year should not exceed $10,000 to $15,000, including cost of new exhibits, rent of rooms, and salaries of manager and assistants.

San Francisco would subserve its best interests if the city government should give the project its direct support, as Philadelphia does for its celebrated Commercial Museum. An appropriation by the municipality of sufficient funds to secure initial exhibits, rent rooms, or to pay a portion of such expense, with the rest to be raised by subscriptions among merchants, manufacturers, exporters, and other interested parties, would avoid delay, which might be injurious to the welfare of United States trade. If the city is unwilling to officially support the scheme, an organization could be formed with headquarters in San Francisco and connections in other cities, both West and East, which should be able to raise the necessary funds by annual subscriptions. The San Francisco Chamber of Commerce or a similar local body could take the lead in its promotion.

San Francisco is suggested as the seat of this museum or bureau, because of its location and commercial relations with the Asian Pacific. If, however, some other city or port should adopt the idea, the principle would still hold good. While the Philadelphia Museums are doing an excellent work and are extending their scope to the far East, their greatest field is naturally South America, South Africa, and Europe. In all these, they will continue to advance American trade interests, but the extent and value of the opening in Asia demand the establishment of such a bureau at San Francisco or at some port directly concerned. If the cities of the Pacific Slope—Seattle, Tacoma, Spokane, Portland, Sacramento, San José, Stockton, Oakland, Los Angeles, and San Diego—will cooperate with San Francisco, they can alone carry on this institution, which will surely bring them large and material returns. It would be wise, however, to have the organization comprise Eastern States and cities, and thus have the sympathy and support of the whole land.

It now requires fully three months for an American manufacturer to receive a reply to inquiries sent to Asiatic ports; through this museum, the same information in most instances could be obtained in ten to twelve days at the outside. One letter would secure data

that now requires a dozen and in one-tenth of the time; one visit to the museum would enable a merchant to see in an hour what probably he could not see in six months of expensive traveling through the original ports represented. Exporters near at hand would reap the advantage of frequent consultation and ready access, but with a good system of correspondence, those at a distance would lose very little.

In connection with the exhibit of imports, should be one of exports. This could be made at remarkably small expense, because the exporting firms in the Asiatic ports would be glad to provide exhibits practically free of charge of all kinds of exports that merchants in the United States might wish to purchase. With this, would also be the necessary data as to prices, houses, duties, etc., so that the American importer could ascertain at short notice where, how, and at what cost he could buy what he wanted.

The unquestioned success of the Philadelphia Museums proves the possibility of success in San Francisco and the actual utility of the plan; but before making this suggestion through the Department of State, I have consulted the leading importing and exporting firms of the far East, from Singapore to Yokohama, as well as many responsible houses in the United States. Without exception, they commend the idea and express a willingness to aid in every way in their power. I am, moreover, confident that ministers and consuls of the United States would lend what assistance they could, whether the exhibits for the museum with the necessary data were collected through them or through special agents sent out by the museum or bureau.

Such a commercial museum would eventually be a center of interest to other than business men; it would have an educating influence in spreading exact knowledge about a vast and comparatively unknown section of the world; it would bring the far East in one sense near to the United States, and hence develop not only closer commercial, but more intimate social relations with a part of the globe which is destined to wield a strong influence in shaping the history of man; it would enable the United States to obtain good results and yet be sufficiently distant in space to escape any evil effects of immediate proximity to the uncounted millions of different blood and race.

JOHN BARRETT,
Minister Resident and Consul-General.

BANGKOK, *May 19, 1897.*

ADULTERATION OF BEER GRAINS.

After a careful investigation of the whole subject, I had the honor, under date of March 12, 1897, to forward a lengthy report to the Department of State upon "Dried beer grains as cattle food," showing that not only was there a valuable and rapidly growing market in Germany for this article for our brewers and driers of these grains, but that our farmers were throwing away great advantages in allowing such a cheap and excellent cattle food to be exported abroad instead of using it to the fullest extent on our own farms, where one hears so much of the scarcity and high cost of food for animals.

This report, although it has not yet appeared in the monthly CONSULAR REPORTS,* has been favorably noticed by the United States press, and shipments of dried beer grains to Germany have steadily increased. Unusually large orders have been given for the future, and I happen to know that one firm alone here has some 3,500 tons now under way from New York, with thousands more to be contracted for. It has been disappointing, however, to learn from an importer who has recently determined to deal heavily in this article that some of his initial consignments have fallen far below samples and show an unscrupulous admixture of the goods with ground indian corn, in order to increase the weight of an ordinarily light substance. Leaving out the dishonesty of the matter, nothing could be more shortsighted. The Germans, above all other peoples, are wedded to scientific methods in all things. They have more faith in the veracity of chemical analyses than in that of figures, for they know that, while "figures never lie," liars sometimes figure. A chemical test is, therefore, applied to everything that admits of it, and it takes a very simple process to detect the adulteration of such an article as beer grains. In fact, the addition of maize is evident to the naked eye. It is not necessary to claim that the admixture renders the food dangerous to health. It is sufficient that it is made with a substance that reduces the requisite percentage of protein and other fattening properties. The Germans could just as well import indian corn and be done with it; but they do not want this. They have found dried beer grains a cattle food preferable for fattening purposes to indian corn, and they want no other when they order it. They prescribe that it shall show such and such a percentage and composition, and they will accept nothing that does not fulfill the conditions of their orders. The result is that, unless these shortsighted methods of admixture are immediately stopped, our entire

* Report was printed in CONSULAR REPORTS No. 202 (July, 1897), p. 389.

export trade in this article, which ought to have such a brilliant future before it (ten years ago our breweries had to pay some one to cart the grains away), will be permanently destroyed, not only for dishonest, but for honest exporters. Once given a bad name in this market, it will never recover, and its fate will be a just one. Most articles, in whatever condition they may be, can be put to one use or another; but it is different with the beer grains, which can not be sold at any price whatever if once adulterated. Already, news has been received here by one of the leading dealers that there is an organized determination on the part of some New York exporters to mix ground indian corn with their shipments. I am authorized to say that, in all cases of impure goods, drafts will be protested and shipments totally refused. The result will be heavy losses and costly lawsuits to our exporters. I to-day read a letter of one of the largest local dealers to an importer, warning him that he will not accept goods that are not thoroughly pure and up to conditions of order, and that he will cancel all orders heretofore given and deal elsewhere. Owing to the fact that we do not extract as much of the substance of the barley in the manufacture of our beers, American dried beer grains have the important advantage over those of England and Germany of containing about 33⅓ per cent more of protien, or fatty properties. It is, therefore, all the more to be regretted that such an advantage should be negatived by adulteration to gain a little more weight.

I have taken occasion in several previous reports to the Department on the subject of the introduction of our food products into the German market—and what is true of Germany is true of Europe and the world over—to repeatedly point out the necessity on the part of our farmers and exporters of having their wares so raised, prepared, and shipped as to leave no opportunity whatever for complaints against them. They should, above all things, be healthful, and should fully conform to sample and any conditions of analysis. The battles which our products are having to fight just now in European markets are too unequal and unfair for us to send any but our purest and most vigorous representatives into the strife. If we ever wish to gain such an enlightened trade as that of European countries, we must get rid of the idea that we can make this a dumping ground for such things as we can not dispose of elsewhere. On the contrary, the merest novice in business tries to gain a new customer with his most tempting wares.

W. HENRY ROBERTSON,

HAMBURG, *July 3, 1897.* *Consul*

UNION OF THE CENTRAL AMERICAN REPUBLICS.

The Department has received reports from Minister Coxe, dated Guatemala, June 18, 1897, and Minister Baker, dated Managua, July 5, 1897, inclosing copies of the treaty of union between the Republics of Central America. The treaty reads as follows:

The Governments of Guatemala, Costa Rica, and the Greater Republic of Central America, through the medium of their respective delegates and plenipotentiaries, as follows: Antonio Batres Jáuregui, Mariano Cruz, and Antonio Gonzalez Saravia, for Guatemala; Leonidas Pacheco, for Costa Rica; Dr. Tiburcio G. Bonilla and Manuel Delgado, for the Greater Republic of Central America—desiring the earliest possible realization of the union of Central America in a permanent manner for the immediate extension of their united mutual political relations, which are henceforth unified as regards foreign nations, and in view of the fact that the States have like grounds of union, the same securities, and similar principles of liberty, order, and progress; to this end, and after exhibiting their full powers, which have been found in due form, and after the necessary conferences and discussions, have agreed upon the following provisions:

ARTICLE 1. The Republics of Guatemala, Costa Rica, Nicaragua, Honduras, and Salvador shall form henceforward a free and independent nation, which shall be called the Republic of Central America.

ART. 2. The signatory Republics constituting the new political unity retain their complete liberty and independence, except as to the points set forth in this treaty, with regard to which they are to be considered as a single nationality.

ART. 3. They shall retain their autonomy in their interior administration, and their unification shall have as its sole object to make them appear in their international relations as a single body for the security of their common independence, their rights, and their dignity.

ART. 4. With this object, the Republics, which in future shall be denominated States, agree to organize a national executive power, the head of which shall be entitled the President of the Republic of Central America.

ART. 5. The Presidents of the present Republics shall be denominated Heads of States.

ART. 6. The Presidency of the Republic of Central America shall be held alternately by terms by the respective Heads of States in the alphabetic order of the nations, to wit: Costa Rica, Guatemala, Honduras, Nicaragua, and Salvador.

ART. 7. The term shall be one year and shall begin on the 15th of September of the present year if this treaty shall have been definitively ratified by that date, and if it is not so ratified by that date, the term shall begin on such day as shall be fixed at the proper time by the majority of the States.

ART. 8. The President of the Republic of Central America shall be assisted by a council of two delegates from each State, who shall have the character of responsible ministers.

ART. 9. The default or absence of any of the said delegates, provided an absolute majority are present, shall not interfere with their deliberations or action.

ART. 10. The President of Central America shall designate one of the members to assume the office of Secretary of State, who shall countersign his decrees and shall be his medium of communication.

ART. 11. The councilors shall be appointed for one year by the executives of the States, and they may be reappointed.

ART. 12. In all measures affecting the foreign policy of Central America, the President shall proceed by deliberation in council and with the vote of an absolute majority of those present. In case of a tie, the vote of the President shall decide.

ART. 13. The duties of the President of Central America shall be: (1) In conjunction with the council, to defend the independence and the honor of the nation and the inviolability of its territory; (2) to observe the provisions of the present treaty and to cause them to be observed by the States; (3) to secure, by pacific means, the maintenance of public order in the States; (4) to determine, in necessary cases, the manner and means by which each of the States shall contribute to the defense of the national territory and honor; (5) to appoint diplomatic ministers, consuls, and consular agents; (6) to receive the ministers and other envoys sent from other nations and to issue the exequatur to commissions of foreign consuls; (7) to cultivate and develop international relations; (8) to issue passports to ministers and envoys from other nations and to withdraw the exequatur from the commissions of consuls in cases provided by law; (9) to determine the proportionate amount which each State must contribute to the common expenses; (10) to maintain good harmony between the States; (11) to conclude and ratify, when necessary, treaties of peace, friendship, commerce, navigation, and exportation, and conventions, contracts, and arrangements affecting the general interests of Central America, but such as affect the peculiar interests of any State or have been concluded at the request of a State shall be submitted to the assembly of that State for approval; (12) to secure the greatest possible development of the means of communication between the States and of maritime commerce on their coasts; (13) to secure the most thorough and speedy unification of coins, weights, and measures under the decimal system, and the fiscal and customs union, and uniformity in the plan of studies.

ART. 14. The council shall have power to develop, in its labors, such methods as may tend to unify the interests of Central America, particularly in the department of legislation.

ART. 15. The diplomatic and consular representation shall, in future, be in the name of the Republic of Central America.

ART. 16. In the exercise of the power referred to in article 13, section (5), the council shall take due care that the representatives come from the different States.

ART. 17. It is understood that whenever a state shall need a separate diplomatic or consular representation, such persons shall be appointed as that State may nominate.

ART. 18. It shall be an essential duty of the council to maintain fraternal harmony between the States, and if its good offices should not accomplish the object desired, it shall be compulsory to refer the matter to arbitration.

ART. 19. It is admitted that this treaty has in view only an approximation to a permanent reorganization of the Central American country, and, consequently, no other object shall be considered, nor shall there be any other construction of its clauses than such as conduce to this ultimate object by pacific measures and mutual expediency.

ART. 20. The Republic of Central America shall be held to be organized whenever more than one State shall unite in its formation, and the nonacceptance of one or more of the clauses here inserted shall not prevent the State rejecting such clause from coming in as a part of the union, provided that, in the opinion of the executive council, this compact is not materially affected.

ART. 21. A native of one of the States shall not be considered a foreigner in any of the other States, but shall have the status of a citizen upon his declaration before the persons in charge of the civil register of his wish to be a citizen.

ART. 22. The civil and political status of a Central American, after complying with the requirements of the foregoing article, shall be governed by the laws of the State in which he resides as to acts committed there.

ART. 23. Hence the election to which article 21 refers will give him the status of a native-born citizen, with all its duties and securities, and domicile will invest him with all the rights and obligations of residency without exception.

ART. 24. Documents issued by any official, when certified, shall have force and effect in each State, subject to its laws; but for the practice of the learned professions, a special permit shall be necessary. In order to do business as a notary public, it shall also be necessary to possess the special qualifications required by the laws of the State.

ART. 25. The states of Central America shall make common cause in international questions affecting their sovereignty or independence.

ART. 26. The aid which one State gives to another shall be at the expense of the State rendering such service.

ART. 27. The President of the Republic of Central America, in conjunction with the executive council, shall determine the mode and form of the aid, so that there may be unity of action.

ART. 28. The authority of the commander in chief of the forces shall be subordinate to that of the State in which the troops happen to be, except when the President of the Republic assumes the direct command. The aid must be given at the place of conflict.

ART. 29. In such cases, all matters relating to peace shall be determined by the National Executive.

ART. 30. Peace between the States of Central America shall be secured by the recognition of the principle of nonintervention. This shall not prevent the States from rendering mutual and voluntary assistance for the maintenance of peace when summoned to do so.

ART. 31. Hence no head of a State shall interfere motu proprio, in any manner, in the questions of internal management of another State.

ART. 32. In order to carry out the provisions of article 18, when one State believes itself threatened or wronged by another, it shall address its memorandum to the executive council, giving a detailed account of the pending difficulty and all the necessary explanations, maintaining in the meantime the status quo.

ART. 33. If the conciliatory intervention of the executive council is not successful after hearing the other side, the parties shall be asked to nominate an arbitrator within a fixed time. In case of disagreement, the appointment shall be made by the council organized for the proceedings to be instituted in such cases. The council shall be composed of the members who have no direct interest in the question, and if the President of the Republic should happen to be excluded, the qualified members shall designate, by a majority vote, the person who shall have a double vote in case of a tie. The arbitral award will have the force of a final judgment.

ART. 34. No State shall authorize or permit in its territory acts of hostility against any of the others.

ART. 35. The surrender of political emigrants shall be made without any other procedure than the demand of the Government concerned.

ART. 36. The right of asylum shall be inviolable in the States and in the Republic, except in the cases mentioned in the treaties of extradition.

ART. 37. The pecuniary and all other liabilities which have been, or may hereafter be, incurred by the respective States shall be the exclusive liabilities of the State incurring them.

ART. 38. In order that the same political spirit which is to facilitate their permanent union may prevail in the constitutions of the States, they shall establish as the basis of their constitutional public law the following: (1) The separation of church and state, absolute respect for creeds; (2) the liberty of the press, without previous censorship (the courts shall take cognizance of offenses and wrongs com-

mitted by the press and punish them); (3) the right to dispose of property by will, subject only to such restrictions as may be attached by statute to intestate estates in favor of institutions of a religious character and to the proper provision for one's family; (4) the inviolability of human life for political crimes; (5) absolute equality in the civil status of men and women; (6) the purely civil character of the acts which establish or modify the civil status of persons, without hindering the celebration of any religious ceremony; (7) the abolition of all perpetuities and institutions of mortmain, with the exception of those which have for their object either beneficence or public instruction; (8) the security of the writ of habeas corpus and the inviolability of property, except in the case of eminent domain for public use or necessity, legally proved, and after payment for the property taken (in time of war, the payment need not be in advance); (9) the absolute mutual independence of the legislative, executive, and judicial powers; (10) the inviolability of the person, except in the case of crime or misdemeanor, and the time of detention for examination shall not exceed five days; (11) the fundamental laws shall not be retroactive, except in criminal matters when they are favorable to the accused and do not authorize confiscation or torture; (12) the right of individual and collective petition is recognized; (13) the right of peaceful meeting, without arms, and for lawful purposes, is recognized; (14) the right of self-defense is inviolable; (15) every citizen is free to fix his own domicile, and to enter or leave the country, except where he has incurred liabilities; (16) the home is inviolable, and shall not be invaded except in the cases and with the forms prescribed by law; (17) in no case shall the private papers of the inhabitants of the Republic be seized, still less examined, without the order of a competent judge; (18) instruction is free, subject to the restrictions required by good morals, but the instruction given in the establishments supported by the State shall be secular, free, and compulsory; (19) equality before the law.

ART. 39. The declaration of these principles shall not prevent any State from inserting in its constitution such others as it may think proper.

ART. 40. The previous treaties concluded between the States shall remain in force so far as they do not conflict with the present compact.

ART. 41. The executive council shall call a national assembly within five years, or sooner, if possible, to frame the permanent constitution of the Republic of Central America, and said term may be extended at the discretion of the council. The national assembly shall consist of ten representatives and five alternates from each State.

ART. 42. The coat of arms and flag of Central America shall be those of the former federation. The present treaty shall be submitted for approval to the assemblies and constitutional bodies, which shall be convoked at the proper time by each State, and they shall endeavor to secure its ratification before September 15 next. Nevertheless, if, on that date, any or all of the ratifications should be wanting, this fact shall not invalidate this agreement. This compact shall be considered as accepted without the necessity of exchange of ratifications from the day upon which all the Governments of Central America shall have notified each other of its approval by their respective congresses.

In witness whereof, the undersigned plenipotentiaries have signed and sealed it in triplicate at Guatemala, on the 15th of June of the year 1897.

ANTONIO BATRES.
MARIANO CRUZ.
ANTONIO GONZALEZ SARAVIA.
LEONIDAS PACHECO.
T. G. BONILLA.
MANUEL DELGADO.

The foregoing treaty should not be confused with the treaty made June 20, 1895, whereby the Republics of Honduras, Nicaragua, and Salvador were united under the name of the Greater Republic of Central America—see report from Consul Little, dated Tegucigalpa, August 23, 1895, printed in CONSULAR REPORTS No. 182 (November, 1895), p. 387. The treaty of June 20, 1895, provided that if the republics of Guatemala and Costa Rica should accept that agreement, the whole should be called the Republic of Central America. It will thus be seen that the treaty of June 15, 1897, was supplementary to the first treaty.

OPENING FOR AMERICAN ENTERPRISE IN CHINA.

Under date of May 11, 1897, Consul Read, of Tientsin, says:

I inclose a copy of a communication from Messrs. Taylor & Co., of Tientsin, as to opportunities for doing business in China. Messrs. Taylor & Co. have recently established themselves in Shanghai and Tientsin, and their partners at this port have already gained a reputation for business integrity and sagacity. Their statements with regard to the advisability of our large firms in America being represented by one American firm of assured standing, are in accord with those frequently expressed by me to the Department.

I earnestly trust and strongly urge that these suggestions may be utilized to the advantage of our trade.

The letter of Messrs. Taylor & Co. (dated Tientsin, May 8, 1897) is, in part, as follows:

As one of the most popular movements in the United States is the advancement of American commerce, and as many prominent men are interested therein, we would ask you to make the subject part of an official communication to the Department of State.

China in the next few years will be a buyer for all classes of machinery, and especially railway materials. It has been demonstrated that America has chances as good as those of any other country to secure orders.

If our American manufacturers will make the proper efforts, it will result in millions of dollars of trade.

A commercial representative should be selected, care being taken that he has influence in the proper quarters, which, as you know, is absolutely essential. This representative should be the sole agent in the East. He should be authorized in the proper form, as are the representatives of European houses, with the seal of the foreign office; and his name should be registered here in the consulates.

In the construction of a railway, the Chinese require rails, sleepers, couplers, and structural iron for bridges and locomotives. If the best houses in America will place their respective business interests in the hands of one good business firm in Tientsin, this firm can bid for everything wanted, will appear strong in the eyes of the Chinese, and each transaction will, perforce, strengthen the mutual business relations between America and China.

If we may be allowed to do so, we would advise that you lay all we have to say before the officials of the Department of State at Washington, with the suggestion that they call the attention of our manufacturers of railway materials, including the Westinghouse Air Brake and Wharton Switch companies, and manufacturers of firearms, locomotives, and men-of-war to the existing opportunities for doing business in this section of the world.

We have information that the Chinese Emperor has issued an imperial edict authorizing the purchase of six first-class battle ships, six first-class cruisers, six second-class cruisers, and twelve topedo boats. The Chinese Government is going to create a loan of 100,000,000 taels, a part of which will go toward purchasing the vessels.

His Excellency Li Hung Chang (who is now at the head of the Tsung-li Yamen), in recognition of the assistance of America in bringing about peace in China's war with Japan, is anxious to do something for America, and if there is half a chance we can secure a large share of this business for that reason.

There will be an enormous trade done here within the next few years, and if America can gain her part, it will mean additional labor to thousands of our workingmen and the bringing to our country large returns in profits to manufacturers.

We write in this manner, not looking so much for personal advantage, as from the standpoint of public-spirited Americans, and if the benefit does not accrue to us, we want to see the business placed upon such lines as to insure to our people at home their rightful share of it. Any assistance toward achieving this end that we can render you will be given with pleasure.

Unfortunately, America has suffered by the class known as adventurers and fortune hunters, who have no visible means of existence and who come to China willing and anxious to advance or accept any visionary scheme that offers the least prospect of success—schemes that no business man would have anything to do with, and each failure sets American interests further in the rear.

From the unceasing energy and active interest you have ever shown in the past to advance everything American, and from your high standing among Chinese officials and merchants of all nationalities, we feel that this communication will meet with your approval.

Mr. Read speaks of the presence in China of Mr. C. D. Jameson, representing the Baldwin Locomotive Works, of Philadelphia. It seems that Mr. Jameson made a contract with the Chinese Government for four locomotives to be delivered at Tangku on or before June 30, 1897; also, for eight locomotives to be delivered between July 20 and September 20, 1897. In a communication dated Tientsin, June 8, 1897, Consul Read says that all the locomotives were shipped by steamer on or about the middle of May. The first four would arrive slightly after the date they were due, but as the other eight would reach China some time in advance, the consul adds that the Chinese seem satisfied.

PRUSSIA'S RAILROAD EARNINGS.

State ownership of railroads plays a very important part in Prussia's finances. Earning enormous sums, serving commerce and manufacturers in times of peace and all strategic purposes in times of war, they have more than justified the arguments that urged the Government to own them and the liberal policies that constructed and developed them in all parts of the Empire. The receipts for 1890–91 were 889,488,579 marks ($211,698,282); for 1895–96, 1,039,420,046 marks ($247,381,970). In 1896–97, they have gone far beyond the budget estimates of 1,020,592,400 marks ($242,900,991). The budget estimates for 1897–98 are 1,110,210,350 marks ($264,230,063). How large and important these figures are will be seen when one compares them with the Kingdom's total income of a trifle over 2,000,000,000 marks ($476,000,000). Thus, more than half Prussia's income is derived from railroads. Direct and indirect taxes bring 234,500,000 marks ($55,911,000); mining and smelting works owned by the State, 127,000,000 marks ($30,226,000); forests and lands, 91,000,000 marks ($21,658,000). These figures represent 21 per cent, 11 per cent, and 8 per cent as much as is made on railroads.

The real value of these railroad statistics is not evident till one takes up the net gains. These, in the last estimate, were 436,000,000 marks ($103,768,000). Out of this surplus, 217,000,000 marks ($51,646,000) go to pay interest, bonds, etc., leaving 219,000,000 marks ($52,122,000) to be employed as the Government may deem best in other departments. The budget estimates of all other Government expenses amount to 480,000,000 marks ($114,240,000). After covering their own expenses, Prussia's railroads supply 46 per cent of this amount.

By careful estimates, wise and economical running of the roads, the results may be easily made much better. In the year just closed (June 30, 1897), the railroads were expected to earn a surplus of 438,000,000 marks ($104,244,000) and to pay of the 440,000,000 marks ($104,720,000), needed to cover expenses in other departments, at least 174,000,000 marks ($41,412,000). The actual railroad surplus was 500,000,000 marks ($119,000,000), giving the Government for other purposes from 230,000,000 marks ($54,740,000) to 240,000,000 marks ($57,120,000). Even after paying or putting aside 20,000,000 marks ($4,760,000) for the disposition fund, the railroads paid a full half of all other Government expenses. Of the 100,000,000

marks ($23,800,000) surplus noted in 1896–97 returns, more than half had its origin in the surplus of the railroads.

No other branch of public property pays so surely and so well. The certainty of the receipts, the amount, the ease with which they are obtained, and their cash character render them the most useful of all the moneys turned into the public treasury. Whether the railroads are managed more successfully than they would have been under private ownership it is hard to say. The State has had its hand on the roads from the very beginning. Seeing how they would aid armies, and also how necessary they would be in the new era opening up to the Empire, the Prussian Government did not hesitate to take the management of the railroads. Their quasi-public character has helped the people to understand that they should be controlled, if not owned, by the State. The tendency all over the Empire is toward State and city ownership of all kinds of transportation facilities, roads, railroads for steam, horses, electricity, etc., as well as of telephones, telegraphs, and other means of communication.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *August 1, 1897.*

NOTES.

Coal and Iron Trusts in Germany.—The following is from Consul Bouchsein, dated Barmen, July 24, 1897:

I quote a few extracts from German papers which I believe to be of great interest to the iron and steel industry of the United States in the extension of the export to Germany. An extract from the yearly report of the chamber of commerce at Hagen, Westphalia, dwells at length on coal, coke, and iron trusts. These trusts have called forth a good many complaints from steel and iron manufacturers as to the greatly advanced price of coal, coke, and raw iron. The report criticizes the coke syndicate for exporting coke to foreign ports at a price almost lower than that given by home manufacturers. It goes so far as to call the coke syndicate a great danger to the national interest. The great demand for and the high prices of coal and coke have naturally forced the iron and steel manufacturers to raise their prices, and the chamber of commerce fears that through the manipulations of the syndicates the doors will be opened to a foreign market and the home industry greatly endangered.

A lengthy article of the Deutsche Metall Industrie Zeitung also dwells upon the above subject, and goes even further and prophesies that in the near future not only the bulk of raw iron will be imported from the United States, but also a market for American manufactured iron and steel will be opened.

German Employment of Women and Children.—Consul Monaghan, of Chemnitz, writes on July 3, 1897:

An imperial decree dealing with the work of women and children in clothing establishments is in many ways interesting. It shows us how even the lot of the humblest workers may be made easier by the watchful care of a government. The shops covered by the law are those that make all kinds of men's and women's clothing. These concerns must give notice to the local police whenever they wish to employ children 14 or 15 years old. They must hang up in the shops, in conspicuous places, lists of the children employed, the number of pauses permitted them, and a card containing a copy of the law regarding the employment of children. School children must not be employed at all in such shops. Children under 14 years, not in duty bound to go to school, must not work more than six hours in each

day; children between 15 and 16 years old must not work more than ten hours. The work of these little ones must not begin before 5.30 a. m. nor must it continue later than 8.30 p. m. Each day must have its pauses, hours in which not only no work must be done, but in which the workers must not be allowed to remain in the shops, except in certain cases. Women must not be employed between 8.30 p. m. and 5.50 a. m., nor must they work after 5.30 p. m. Saturdays or on the evenings preceding holidays. They must not work more than eleven hours daily and ten hours on Saturdays and the days preceding holidays, exclusive at least of a one-hour midday pause. Inasmuch as most of this work depends upon the changes of seasons, the law allows women to work thirteen hours a day in the busy season, but not later than 10 p. m. for sixty days.

Medical View of Bicycle Riding.—Under date of July 26, 1897, Consul Keenan sends the following from Bremen:

At a meeting of the medical society in Berlin, January, 1896, Dr. Mendelssohn, professor in the university, read a paper on the medical view of bicycle riding, which was published in the Deutsche Medical Wochenschrift, No. 18, 1896. More recently it has appeared in the Centralblatt für allgemeine Gesundheitspflege, and it is now being discussed in the German press in general. The chief points of the paper were:

The advantages of wheel riding may be inestimable, if practiced intelligently and with moderation, but harmful or absolutely dangerous if carried to excess or in cases where riding should be prohibited. The advantages accruing to riders are obvious, since the wheel affords exercise and recreation to the mentally overworked, and as an independent and inexpensive means of locomotion it is ideal. The danger of the wheel may consist of injuries from accident, inflammation of the knee joint resulting from overwork, inflammation of both male and female pelvic organs resulting from pressure of the saddle, etc. Another danger is in the constant excessive exertion, which can produce an increased atomic and molecular change throughout the body, especially in the vital organs, to such a degree that a general weakening of the individual and an especial susceptibility to infectious diseases may result. The tendency to catch cold is proved by experience to be great. The heart is subject to the greatest danger in cases of excessive cycle riding. A large number of sudden deaths have already been recorded, due to excessive strain on the heart.

Cases where wheeling should be prohibited are as follows: (1) Existing heart lesions, (2) arterial calsification, (3) albuminuria, (4) old age, and (5) childhood.

Cases where bicycling is beneficial are: (1) When excessive uric acid and gout exist, (2) in certain mild forms of chronic disturbances in the pelvic organs, which are thereby subjected to a certain degree of exercise, which has an effect similar to the gymnastics and massage of the Thur Brandt method; (3) when there are slight disturbances in the respiratory organs, except absolute lung dilatation.

It can be said that important points relating to the advisability of bicycling by girls and boys of certain temperament, as well as by

certain neurotic women, are not observed in the foregoing remarks, but it must be conceded that the conclusions stated by Dr. Mendelssohn are true.

Premature Burials.—Consul Mantius writes from Turin, July 28, 1897:

Prominent physicians and laymen are at present busily engaged in preparing an exhaustive report, with exhibits, on the subject of "Apparent death and premature burial." This report will be the striking feature of the medical department at the national exposition to be opened here in April, 1898.

Reports of similar kind are expected from all over the world. There will be an international competition and a prize will be awarded for the best work on the solution of a problem in which not only the profession, but, more or less, every mortal is interested.

Up to the present time, no infallible test for distinguishing apparent from real death has been discovered, in consequence of which horrifying cases of persons buried alive occur from time to time, and are narrated in medical journals and daily papers. The committee of physicians and laymen organized to gather and sift the material realize that the first step to remedy such conditions should be to obtain modification of the laws relative to the limited space of time allowed for bodies to be kept before burial in some countries. It is clearly proved that the number of persons buried alive is much larger in such countries. Therefore, the members of this commission appeal to the heads of the governments and to all those whose position gives them influence over the people for their support in a movement which can not fail to interest humanity. It is the intention to start a periodical, which will be devoted to the furtherance of the matter in hand.

Early this year, the Italian Government, through foreign ambassadors and ministers, extended an invitation to other nations to take active part in those branches of the Turin exposition which are of an international character. The main feature of the medical department might have been easily overlooked in the bulk of other interesting material. I believe inestimable good to the cause will be done by bringing it to the notice of the people of the United States.

Textile Industry in Russia.—Consul Monaghan, of Chemnitz, July 17, 1897, says:

The textile industry in Russia, established in 1848 by French emigrants in Moscow, consumes more than 40,000,000 francs' ($7,720,000) worth of raw silk, imported from Europe and from the extreme East.

This industry is almost exclusively concentrated in the district of Moscow, where, since 1855, there have been built 148 large factories, containing 8,874 looms, producing goods worth more than 7,000,000 rubles,* and 72 establishments of lesser importance. In other districts, are found 25 mills, producing goods worth 1,000,000 rubles.

The ribbon industry, protected by the highest import duties, has made great progress during recent years. All the ribbon factories are in or near Moscow; their annual production amounts to over 600,000 rubles.

The cotton plantations, established in 1885 in the district of Ferghane, Russian Turkestan, are now of considerable importance. The cotton production amounted in 1890 to 300,000 poods (4,823 metric tons) and 17 establishments were occupied in the ginning and cleaning of raw cotton. In 1892, the cotton industry of Russia employed 191,290 looms, 639,000 men, 210,000 women, 8,200 girls, and 18,000 boys. The mills situated in Moscow and in the districts of Vladimir, Tver, and St. Petersburg are producing cotton articles worth nearly 260,000,000 rubles.

Russia, the first nation in Europe in the production of wool, has 45,000,000 common sheep and 15,000,000 merino sheep pasturing on the vast prairies of southern Russia. Russia's wool production amounts to 10,000,000 poods (361,120,000 pounds) annually, nearly 6 pounds per sheep. In 1895, there were 68 spinning mills in the districts of Moscow and St. Petersburg, employing 4,789 hands and producing wares worth more than 5,000,000 rubles. Moscow and surroundings lead in woolen weaving; then come Tver, St. Petersburg, Warsaw, Lodz, and Kharkov. European Russia has nearly 450 mills, employing 50,000 workmen and producing woolen articles worth 45,000,000 rubles.

Constitutional Amendments in Switzerland.—Consul Germain writes from Zurich, July 15, 1897:

Constitutional amendments were voted on and adopted by the Swiss people on Sunday last, July 11. The first amendment relates to forestry and gives the Federal Government control over and power to enact uniform laws to regulate Swiss forests. The second amendment puts the manufacture, sale, and importation of food products under federal control. These two amendments will relieve the cantons from vexatious legislation, heretofore differing in each of the twenty cantons and four half cantons, and give the whole of Switzerland uniform laws on forestry and the manufacture, sale, and importation of food products.

*The "paper ruble" is the actual currency of Russia, and was estimated by Consul General Karel, in July, 1897, at 51.4 cents.

Sicilian Fruit Exports in 1896.—Under date of July 21, 1896, Consul Seymour writes from Palermo:

I inclose table showing exports in tons of green fruit from Sicilian ports to foreign countries during the year ended December 31, 1896; also, duty levied per box by the different countries. The best fruit goes to the United States, Germany, and Russia; the poorest quality to the United States, Austria, and England. Comparatively little fruit is exported to Italy—the duty imposed by some Italian towns is as much as 50 cents per box.

Exports to foreign countries and duty on box weighing about 90 pounds (about 2½ cubic feet space).

Countries.	Duty per box.	Exports from—			Total.
		Palermo.	Messina.	Catania.	
		Boxes.	*Boxes.*	*Boxes.*	*Boxes.*
United States	$0.22	60,030	33,696	9,745	*103,471
Austria	Free.	641	12,067	17,920	30,628
England	....do....	8,961	9,698	5,620	24,279
Russia	1.60	378	8,803	6,835	16,016
Germany	.40	852	9,738	1,475	12,065
Turkey	8 per cent.	32	1,091	3,815	4,938
Australia	.28 to .68	54	2,163	.....	2,217
Holland	10 per cent.	346	682	524	1,552
France	.70	61	530	134	725
Other countries	.....	52	2,099	668	2,819
Total	.....	71,407	80,567	46,736	198,710

* Includes fruit exported to Canada, about 15,000 boxes.

Steamship Service between New York and Tangier.—Consul-General Burke, of Tangier, reports July 3, 1897, as follows:

Referring to my report of June 21,* I have the honor to say that for some reason the steamship *Sarnia*, from Genoa for New York, while it anchored at this port this morning, did not communicate with the shore. I am informed there was a misunderstanding on the part of some one connected with the agency, either here or at Genoa. I regret very much that it so happened, as it will be likely to discourage the Atlantic Line Company in the attempt to place Tangier on its itinerary. However, I shall write the agents at Genoa regarding the matter.

Japanese Petroleum—Consul-General McIvor writes from Kanagawa, July 26, 1897:

I have the honor to forward, for the information of the Department, an article taken from the recent issue of the Chugai Shogyo,

* Printed in CONSULAR REPORTS No. 203 (August, 1897), p. 588.

a Japanese periodical, giving certain figures as to the increase in the native production of kerosene oil in Japan. I forward the article in continuation of my report under date of October 22, 1896.*

The demand for kerosene oil in Japan has become very extensive. It is not only used for lighting purposes, but as the originator of motive power. It may also be refined and used as machinery oil. At present some 6,000,000 yen worth of American and Russian oils are imported annually, but the actual conditions of the oil districts in Japan—that is to say, the province of Echigo and its environs—are very promising. The oil districts of Japan extend from Hokkaido to Akita on the north, traverse the provinces of Echigo and Shinano, and reach the Totomi province. In Amagasemachi, Mishima district; Niitsumachi, Kambara district; Miyagawamachi, Kariha district; and Urase, Koshi district, in Echigo province, there are a number of companies which have boring machinery used for their work. The number of machines now in course of fitting up by the various companies in Tosan district is as follows:

Companies.	Number of machines.	Companies.	Number of machines.
Nippon Kaisha	8	Naikoku Kaisha	1
Koshi Takarada Kaisha	7	Niigata Kogyo Kaisha	7
Hinomoto Kaisha	2	Zo-o Kaisha	7
Hokuju Kaisha	1	Hokuyetsu Kaisha	4
Nippon Kaiyo Kaisha	1	Nakao Kaisha	2
Koshidani Kaisha	1	Katsura Kaisha	1
Seirei Kaisha	1	Kitz Serizawa Kaisha	1
Ohira Kaisha	8	Fuji Kaisha	1
Fuso Kaisha	6	Total	56
Kyoyetsu Kaisha	2		
Zenyetsu Kaisha	1		

Besides, 28 machines will have to be fixed within the year, making the total 84. Hitherto the work had not been earnestly undertaken on account of the easy access to the foreign oil, and the wells have been sunk in an unscientific manner about 600 feet, but since 1890 American boring machinery and its accessories have been introduced, and at present oil is taken out from the depth of 800 to 2,000 feet. The process of refining has also been greatly improved, so that Japanese oil is now practically the same in quality as foreign petroleum. The principal markets of the Echigo oil are the Hokkaido, Shinano, and northern provinces in the mainland.

Consul Monaghan, of Chemnitz, on July 10, 1897, says:

The German Empire is turning its attention to the oil territory of Japan. In 1891, Japan produced, so say German papers, 10,080,000 liters (1 liter=1.0567 quarts) of petroleum; in 1892, 13,140,000 liters; in 1893, 16,740,000 liters; in 1894, 24,840,000 liters. If, instead of the eighty men who work the wells now, a syndicate similar to that of the Standard Oil Company or Russian Trust could be organized, the product could be multiplied many times. An effort is being made in Tokyo to organize such a syndicate. Even the 24,840,000 liters of 1894 do not supply the demand. In 1895, Japan imported 2,240,000 hectoliters of petroleum, worth $5,135,000. The demand

* Printed in CONSULAR REPORTS No. 197 (February, 1897), p. 264.

is increasing. All eastern Asia offers a market for Japan's oil, hence any and every effort to develop the industry must pay. The oil is found in considerable quantities in several places. Recent reports say Formosa has wells. It might be worth while for our manufacturers of oil-well working and refining machinery to look to the Japanese oil districts for markets.

Oil Wells in Quebec.—Consul Dickson writes from Gaspé Basin, July 30, 1897:

The Petroleum Oil Trust Company has for some time extended its operations to a district about 22 miles distant from Gaspé Basin, near one of the tributaries of the York River, called the Mississippi Brook. Several wells have been bored in that neighborhood, with varying results; some have yielded half a barrel, some one barrel, per day. On the 23d of July, well No. 27, in that district, produced a quantity of oil from a depth of 1,400 to 1,500 feet. This is the best known so far in Gaspé. The well flowed several times before it was under control, and 300 to 400 barrels are said to have been lost. It was pumped this week, and gave at one pumping 1,600 gallons. During the time taken to replace the plug the well filled again, and the oil was forcing the plug.

I deem it my duty to draw the Department's attention to this well, as the oil is of very good quality and the rock beds are nearly flat in its neighborhood, whereas in the parts of the country first prospected, the wells were bored into the rock at a sharp angle. The company is having several tanks built around this well, and it is said they intend to bore other wells in the vicinity immediately.

Imports into British India.—Under date of July 10, 1897, Consul Monaghan sends the following from Chemnitz:

British India imported in 1895–96, 2,012,000,000 rupees (the rupee was valued July 1, 1897, at 21.1 cents), against 1,967,000,000 rupees in 1894–95. The following tables tell from what countries the imports came:

Countries.	1893–94.	1894–95.	1895–96.
	Rupees.	*Rupees.*	*Rupees.*
England	866,500,000	849,500,000	833,000,000
China	147,000,000	154,000,000	167,500,000
Germany	93,500,000	94,500,000	164,000,000
France	118,500,000	95,500,000	96,500,000
United States	54,000,000	69,500,000	70,500,000
Belgium	78,000,000	56,500,000	67,000,000

Thus Germany, in 1895–96, has gone up to third place, as compared with seventh place in 1891–92.

The imports of manufactured articles were as follows:

Countries.	1893-94.	1894-95.	1895-96.
	Rupees.	*Rupees.*	*Rupees.*
England	520,000,000	511,000,000	471,500,000
China	35,500,000	26,500,000	28,000,000
Belgium	20,500,000	18,500,000	27,500,000
Germany	17,000,000	17,500,000	23,500,000
Straits Settlements	25,000,000	21,000,000	21,000,000
Russia	12,500,000	16,000,000	18,500,000

India offers a fair field for many of our articles of export. Half the effort made by German agents ought to obtain a much larger share than we have hitherto had of the markets of Calcutta, Bombay, and Benares.

American Catalogues in China.—Consul Read writes from Tientsin, June 17, 1897:

I inclose herewith a copy of a letter addressed to me yesterday by Mr. F. H. Clarke, manager of the Tientsin Trading Company at this port. The complaint made by Mr. Clarke that discounts are not given in the American catalogues sent to him deserves to be called to the attention of our manufacturers who are seeking foreign markets for their products. I would respectfully suggest that Mr. Clarke's communication to me be given publicity in CONSULAR REPORTS, with the advice that when catalogues are sent abroad discount sheets should accompany them.

TIENTSIN, CHINA, *June 16, 1897.*

SHERIDAN P. READ, Esq.,

United States Consul, Tientsin.

DEAR SIR: Knowing that you take a keen interest in furthering American trade, I beg to draw your attention to one point, in the hope that you may be able to do something in order to remedy it.

I have lately received quite a number of catalogues from American houses, but in no single case do they state terms. Many of the catalogues appear to be intended for the general public and not for wholesale dealers. There must necessarily be heavy discounts, but on this point no information is given.

If they made it clear that the price quoted was wholesale net price, we could understand it; as it is, the catalogues are useless.

Apologizing for troubling you, I beg to remain, yours truly,

F. H. CLARKE.

United States Life Insurance Company in China.—Consul Read, of Tientsin, under date of June 19, 1897, says:

I have the honor to call attention to the fact that the Equitable Life Assurance Society of the United States has lately begun to insure

Chinese, which is a departure in the right direction, as the Chinese higher classes and officials take readily to the endowment policies as a safe means of making investments which can not be touched and upon which "squeezes" can not be levied. J. P. Grant, esq., the representative of the Equitable, is now in Tientsin. I introduced Mr. Grant to the taotai, who was much interested in the explanations of modern forms of life insurance. Within a few days after his arrival, Mr. Grant insured Chang Yen-mow, the managing director of the Chinese Engineering and Mining Company, for 100,000 taels,* and has written in other quarters 160,000 taels. Mr. Grant states that before the closing of the port for the winter he is confident of writing 1,500,000 taels in Tientsin. That China is a rich field for insurance is shown by the fact that, with but intermittent canvassing for several months, the Equitable has issued to the Chinese between twenty-five hundred and three thousand policies.

Railways Projected in the Malay Peninsula.—Consul-General Pratt writes from Singapore, July 15, 1897:

As the result of a movement inaugurated by the enterprising resident-general of the federated Malay states, Sir Frank Athelstane Sweltenham, the Secretary of State for the colonies recently approved a loan of $5,000,000 (Mexican) for the building of new lines of railway in the Malay Peninsula, to be constructed in sections as follows: (1) From Kuala Prai to Ulu Sa' Petang—50 miles—from whence there is a line already in existence to Taipeng; (2) Taipeng to Kuala Kangsae, 20 miles; (3) Tapuh Road to Tanjong Malim, 50 miles; (4) Tanjong Malim to Kuala Kubu, 16 miles; (5) Kajang to Seramban, 31 miles. When completed, these lines will give through communication from Kuala Prai, directly opposite Penang, to Port Dickson, a total distance of from 315 to 320 miles, without counting the lines from Taipeng to Port Weld (8 miles), Tapuh Road to Telok Anson (17 miles), and Kuala Lumpur to Kuala Klang (29 miles), making a total of some 370 miles of railway, which it is expected to have in operation here within the next five years. Work has already begun on section 2, and is shortly to begin on sections 1, 3, and 4. It is not yet determined how the loan referred to is to be negotiated, but it is considered probable that a portion of it will be subscribed for on the spot. The routes which the new lines are to follow may be located upon the map I had the honor to transmit in my dispatch of the 28th ultimo.† The present undertaking, which, in my opinion, is but the beginning of a general extension of the Malayan railway

* On July 1, 1897, the value of the Shanghai tael was 65.5 cents.

† Filed in the Bureau of Foreign Commerce, Department of State.

system, might, I think, be turned to the advantage of steel-rail manufacturers and car and locomotive builders in the United States, and it is with this object that I am now seeking for fuller information to submit on the subject.

Fiscal Duties in Peru.—The following copy of a decree has been received from Vice-Consul McBride, of Callao, under date of July 12, 1897:

[From the Lima Commercio, June 24, 1897.]

EQUIVALENCY OF COIN.

The President of the Republic, considering that it is to the interest of the nation, decrees:

The fiscal duties can be paid in pounds sterling, coined money, at the rate of £1 per each 10 soles.

Issued at the House of Government at Lima, the 24th day of June, 1897.

N. DE PIEROLA.

Financial Conditions in Mexico.—Under date of August 12, 1897, Consul-General Donnelly, of Nuevo Laredo, says:

I have the honor to report a marked rise in the prices of all commodities in Mexico, as a result of the recent fall in the price of silver. This was to be expected of imported goods, but domestic products and even rents have risen. There has been no corresponding advance, however, in wages or salaries. Labor stays on its silver basis.

On September 1, 1897, Consul-General Barlow sends from Mexico City the following answer to an inquiry from the Northwestern Agriculturist, Minneapolis, Minn.:

From what I learn, wages here are generally the same, although paid in silver, which is declining. The larger business houses and a number of the smaller dealers are endeavoring to protect themselves by advancing prices. This refers to the necessaries of life raised in this country as well as goods imported.

Commercial Agency in Mexico.—Consul-General Donnelly writes from Nuevo Laredo, July 21, 1897:

Referring to my dispatch of April 24, urging the need of a commercial agency in Mexico (which the Department saw fit to give immediate publicity*), I have the honor to report that, as a result thereof, negotiations for the establishment of such an agency under the very best American auspices are already pending and seem certain to be speedily consummated.

* Printed in CONSULAR REPORTS No. 201 (June, 1897), p. 329.

New Steamship Line to Colombia.—The following is from Consul Smyth, dated Cartagena, July 30, 1897:

I have the honor to report the arrival at this port during the past week of the steamship *John Wilson*, from Mobile, Ala., with a cargo of pitch pine, thus inaugurating a new steamship line between this port, Bocas del Toro, and Mobile. This line is to run under the auspices of the Snyder Banana Company. It is proposed to bring freight from Mobile here and to take a return cargo of bananas from Bocas del Toro to Mobile. The steamers will run fortnightly. The authorities of Mobile have stationed a health officer in Cartagena to give certificates to these steamers in order that the latter may not have their cargo of bananas detained by the quarantine in force in Mobile. If this line of steamers proves a success and becomes permanent, it will furnish excellent mail facilities between Cartagena and the United States.

Export Duty on Coffee Suspended in Colombia.—Consul Bidlake writes from Barranquilla, July 28, 1897:

The export duty on coffee in Colombia will be suspended from the 1st of August next. I am unable to say if this suspension is permanent, as the only information that I have is the telegram (a copy of which I inclose) received by the collector of customs at this port. Article 2 of law 37 of 1896 empowers the President "to diminish or abolish the present duty on coffee, should this article suffer a great depreciation in foreign or local markets." I forwarded to the Department a copy of this law in a dispatch dated February 20, 1897.*

[Translation.]

Official.] OFFICE OF THE COLLECTOR OF CUSTOMS,
Cartagena, July 27, 1897.

Collector of Customs, Barranquilla.

The export tax on coffee is suspended from the 1st day of August next. In the Diario Oficial of the 20th of this month you will see the decree on the subject.

EMIGDIO SOLANO.

Consul Smyth, of Cartagena, under date of July 30, 1897, sends a report on the same subject, and adds that the tax has been in force for over two years. It was originally imposed, says the consul, on account of the extra expense incurred by the Government in the civil war of 1894–95. The tax consisted of $1.60 for every 50 kilograms (110.23 pounds) of coffee exported from Colombia or used for home consumption.

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*Printed in CONSULAR REPORTS No. 201 (June 1897), p. 281.

Coffee Exports from Brazil.—Under date of July 1, 1897, Consul Hill, of Santos, says:

I inclose herewith a table issued to-day, and which was compiled by the secretary of the chamber of commerce of Santos, showing the quantity of coffee exported from this port during the fiscal year ended yesterday and the destination of the same.

Résumé of the exportation of coffee for the fiscal year 1897.

To—	Quantity.	To—	Quantity.
	Bags.		*Bags*
New York	1,463,280	Bordeaux	3,825
Hamburg	1,050,206	Odessa	700
Havre	735,226	Buenos Ayres	555
Rotterdam	617,965	Naples	542
Trieste	372,413	Stockholm	400
Antwerp	333,004	Constantinople	400
New Orleans	67,922	Beirut	301
Marseilles	58,436	Varna	250
Genoa	58,120	Liverpool	250
Bremen	48,671	Algiers	250
Baltimore	24,128	Oran	125
London	22,515	Palermo	100
Copenhagen	17,875	Catania	40
Canal	17,500	Lisbon	30
Venice	15,100	Oporto	20
Charleston	12,500	Coast cities (Brazil)	37,215
Fiume	9,000	Total	4,963,062
Alexandria	4,208		

Waterworks in Panama.—Consul-General Vifquain writes from Panama under date of July 20, 1897:

I beg to report that the department of Panama has signed a contract with Messrs. Emile Lebon and Belisaire Marenovich, of Brussels, Belgium, for the construction of waterworks in this city. The contract was signed June 29, 1897, and the contractors are to assume actual charge of the works within six months from that date. The capital stock of the company is to be $1,000,000 (gold). The water is to be brought by pipes from the Juan Diaz River, 15 miles from this city. This water is excellent, coming from the mountains. All plans and studies have been completed, and a great deal of actual work has been done in the construction of roads, bridges, dams, etc. All this work was done under the direction of the Government, and the same is for the account of the contracting company. The contractors have a period of two and a half years from June 29 to have the waterworks completed and the city furnished throughout with water. The importance of this enterprise can not be realized. Water used here now comes either from the roofs of houses or from bad wells, and is very unwholesome and causes much sickness. The sew-

erage of this city also dates back to the time of the Spaniards, and is little better than no sewerage at all, being stopped up at many places, hence resulting in bad odors throughout the streets. Waterworks, with good drinking water, proper sewers, and drainage will result in a vast improvement in the healthfulness of this city. The laying of the pipes in the streets, involving opening the ancient sewers, together with the customary bad effects of excavating in this country, will probably cause an epidemic of yellow fever.

Margarin in Martinique.—Under date of July 7, 1897, Consul Tucker sends the following from Martinique:

Referring to my dispatch dated July 5,* I have the honor herewith to inclose the official notice to commerce, duly translated, as follows:

NOTICE TO COMMERCE.

The law of April 16, 1897, concerning the repression of fraud in the butter business and in the manufacture of margarin, which was promulgated in this colony as per decree of May 29, 1897, and published in the Official Journal of June 1, contains, among other prescriptions, the complete prohibition of colored margarin.

The administration, realizing that the merchants were not informed in due time of that prohibition, has authorized the entry of the colored margarin already landed, since it was upon the sea before the promulgation of the said law of the 16th of April, 1897. But commerce is informed that in the future the law will be strictly applied and that colored margarin will no longer be admitted into this colony.

Railroad in the Dominican Republic.—Under date of July 28, 1897, Consul Grimke writes from Santo Domingo:

I have to inform the Department of the completion of a railroad about 45 miles long between Puerto Plata, on the north coast, and Santiago, in the interior of the Dominican Republic. Although the distance covered by the road is comparatively unimportant when compared with the great railway lines of the United States, it is by no means insignificant for this country. Its construction has been the work of years, and the line, short as it is, crosses two mountain ranges. American and European capital is embarked in the enterprise, and the road is operated by the San Domingo Improvement Company, an American corporation. Since 1892, Edward Hall, an American engineer, has directed the work of construction. The materials for building and operating the road have come largely from Europe, although a portion, such as bridges and some of the rolling stock, has been imported from the United States. Messrs. Drake & Stratton, American contractors, were awarded the contract for

* Printed in CONSULAR REPORTS No. 203 (August, 1897), p. 578.

constructing a part of the line. On the 16th of next month the road will be formally opened by the President of the Republic, General Heureaux. I am informed that it is well equipped with rolling stock, and will run three trains a day between Puerto Plata and Santiago. The country through which the line passes comprises some of the richest coffee and cacao lands of the island. The object is to connect the fertile valley of Santiago with a seaport. This valley produces for export coffee, cacao, tobacco, beeswax, hides, lignum-vitæ, mahogany, satinwood, logwood, etc. In the Dominican Republic, there is but one other railroad for public use, viz, the Samana and Santiago Railroad, which has been in operation since about the year 1887 and runs from Samana to La Vega, in the valley of Santiago, a distance of 60 miles. It was built and is owned and operated by Scotch capital.

American Type in South America.—Vice-Consul Berg writes from Rio Grande do Sul, Brazil:

A printer in my district, who uses type from various countries, expressed to me his opinion as to the superior quality of the American kind. He had lately given an order for American type, asking, also, for the accented letters used in the Portuguese language, which apparently could not be supplied, and the order had to remain unexecuted. Type founders in other countries are prepared to supply complete alphabets for almost any language. The American type also has a defect in the eyes of printers here, as it does not correspond exactly in pointage with that of other countries, which have type all alike in this respect. That of American manufacture shows an increase of about half a point in length and a trifling increase in the height of each letter. This objection to the American article has no doubt not only been raised here, but in other places as well. I feel confident, could those difficulties be overcome, that American type would be more largely employed for stationery printing. Under present conditions, printers are unable to use the same in combination with that of other countries.

Antidote for Snake Bites.—Consul Germain, of Zurich, under date of July 15, 1897, calls the attention of the Department to an article appearing in the Weekly Scotchman in regard to the antivenomous properties of the bile of serpents. Experiments with the bile of the African cobra, the puff adder, and the rattlesnake, it was stated at a meeting of the Royal Society of Edinburgh, showed that the bile, when mixed with the venom of serpents, was able to pre-

vent lethal doses of the latter from producing death. Although nontoxic in the alimentary canal, the bile salts and pigments acted as poisons when injected under the skin or into a blood vessel. It was improbable, the article continued, that bile in its natural form could be used as an antidote, except by internal administration or by application to the wound caused by a snake bite. The report has been referred to the United States Marine Hospital Service.

United States Money in Chile.—Vice-Consul Greene writes from Antofagasta, July 26, 1897:

I observe that men coming to the coast bring American gold. Travelers should be informed that British sovereigns are better. People are always ready to buy them at fair rates of exchange. Except in large commercial centers like Valparaiso, American gold is little known. In the interior towns, its sale is difficult. I would again call attention to the valuable services rendered American producers and manufacturers by the steamers of Browne, Beeche & Co. and W. R. Grace & Co.* Though exclusively employed in the American trade, the Browne, Beeche & Co. and W. R. Grace & Co. steamers are British. Besides two Chile companies (one large and one small), the Pacific Steam Navigation Company, of Liverpool, England, is engaged in the coasting trade.

Hemp and Hemp Machines in Italy.—Mr. Carlo Gardini, consular agent at Bologna, has sent to the Department a long and elaborate report upon the cultivation of hemp in the provinces of Bologna and Ferrara, in which provinces it is the leading agricultural industry, the product being considered "the best hemp in the world." The report, being detailed and technical, has been turned over to the Fiber Division of the Department of Agriculture for such use as that division may consider best for the information of American hemp growers.

The value of this hemp declared at Bologna for export to the United States amounted to $246,691 and $219,476 during the fiscal years 1895 and 1896, respectively. Besides this, Mr. Gardini says that many other invoices were declared at Leghorn, Venice, Liverpool, and Hamburg.

Mr. Gardini calls attention to the fact that sowing machinery of advanced American manufacture is not well known among the farmers, and, in this connection, he suggests that it would be both prac-

*See CONSULAR REPORTS No. 177 (June, 1895), p. 371.

tical and profitable to American manufacturers to be represented by their machines in Milan, Bologna, and Naples, so that the hemp farmers could become acquainted with their uses and utility.

Among the illustrations which accompany Mr. Gardini's report is one of a scutching machine of recent invention, and not yet patented, which gives excellent results. This machine, he says, can easily clean 25 tons of fiber per day of twelve hours when well attended by eighteen or twenty adults. It can be driven by a common thrashing engine. The price of this machine is 750 lire ($144.75).

Italian Statistics as to Trade with the United States.—Ambassador Draper writes from Rome, under date of August 21, 1897, to the following effect:

In my studies of the commerce of the United States with Italy, I observed that in the Italian custom-house returns, the trade of Canada was consolidated with that of the United States, while other nations having important commercial relations with Italy were classified separately. I brought the matter to the attention of the authorities here, and stated that it would be most useful for the merchants of the United States to have statistics from Italian official sources covering the import and export trade between the two countries. I am gratified to be able to report that the Government has ordered that hereafter the statements of commerce with the United States shall be made separate and apart from those of any other country.

Metric System in Paraguay and Uruguay.—Under date of August 6, 1897, Minister Stuart writes from Montevideo:

"In the CONSULAR REPORTS published by the Department, Paraguay and Uruguay do not appear in the list of countries that have adopted the metric system of weights and measures. The use of this system was made obligatory by law in Uruguay in 1894, and it is strictly enforced. It is also obligatory in Paraguay, but I am informed that it is not strictly enforced as yet in the country districts."

By reference to the table of foreign weights and measures given in each number of the CONSULAR REPORTS, it will be observed that the table of metric weights and measures, with English equivalents, is given without statement as to the countries to which they apply, their use in many countries being merely nominal. The table to which Minister Stuart refers gives the weights and measures in common or frequent use in the various countries of the world.

Bananas in Colombia (Correction).—Consul O'Hara writes from San Juan del Norte, August 30, 1897, that, in his report on the "Banana trade of Colombia," printed in CONSULAR REPORTS No. 203 (August, 1897), p. 564, the statement is made that bananas bring 37.44 centavos (18.72 cents in United States currency) per bunch. The consul says the sentence should be corrected to read: "Bananas bring 37.44 cents (United States) per bunch for firsts, and 18.72 cents (United States) for seconds."

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
Robert J. MacBride, Leith (Edinburgh).	July 3, 1897	Canada's food supplies.....	Department of Agriculture.
Edwin F. Bishop, Chatham.	Aug. 24, 1897	Canadian crop report.....	Do.
Louis Stern, Bamberg.....	July 2, 1897	American corn in Germany..	Do.
William H. Madden, Cologne.	July 17, 1897	United States flour in Germany.	Do.
Eugene Germain, Zurich...	July 14, 1897	European fruit-crop outlook.	Do.
Thos. E. Heenan, Odessa...	June 15, 1897	Agriculture in Russia: Opening for United States machinery.	Do.
Daniel W. Maratta, Melbourne.	July 20, 1897	Gold returns.....	Treasury Department.
Eugene Germain, Zurich...	July 15, 1897	Antidote for snake bites.....	Marine Hospital Service.

FOREIGN REPORTS AND PUBLICATIONS.

French Commerce in the First Half of 1897.—The Revue du Commerce Extérieur, Paris, August 7, 1897, says:

The results of the first six months of the year have been very favorable, both to agriculture and national industries. There has been a decrease in the imports and an increase in the exports of agricultural products of 12 per cent and 6 per cent, respectively. The export of the products of national industries is 5 per cent larger than it was during the corresponding period of last year. The imminent change in the tariff laws of the United States is, of course, responsible in part for the increase in exports; but only about one-seventh of the gain can be accounted for in this way. The jubilee celebration caused an augmentation of exports to England during the month of June; but a steady growth is apparent during the other five months.

The exports to Russia and Switzerland remained stationary; they were one-fourth less for Brazil, 6 per cent less for the Argentine Republic, and 3 per cent less for several other countries. There was a large increase in the products sent to Italy, Turkey, and Spain. Silk goods, woolens, and prepared skins showed the principal gain; it amounted to the value of 29,000,000 francs ($5,597,000) for silks, of which nearly one-fourth went to the United States, 9,000,000 francs ($1,737,000) in woolen goods, and about the same amount in skins, although there was a decrease in leather articles.

In the import trade, a striking fact was the decrease in wines. There was also a noticeable reduction in cattle, meats, cereals, and sugar. An increase was made in the fats imported, but it amounted to the value of only 3,000,000 francs ($579,000). The decrease in wools imported was 23,000,000 francs ($4,539,000). More silk (56,000,000 francs, or $10,808,000 worth) was imported. The increase in the import of cotton amounted to 26,000,000 francs ($5,018,000), and there was 9,000,000 francs' ($1,737,000) worth more of oil brought into France than during the first six months of 1896. There was also a gain in industrial machinery to the value of 6,000,000 francs ($1,158,000). The United States, Turkey, Switzerland, Russia, and Brazil did not suffer in this reduction of French imports—especially the first-named country, which showed an increase of over 42,000,000 francs ($8,106,000). Less of the product of Great Britain and the Argentine Republic was imported, but the chief decrease was in the commerce with Spain. The difference amounted to 64,000,000 francs ($12,352,000), of which 62,000,000 francs' worth was in wines.

The following tables give further details:

Imports and exports for the first six months of 1897.

Articles.	Imports.		Exports.	
	Francs.		*Francs.*	
Alimentary objects	444,756,000	$85,837,908	334,014,000	$64,464,702
Raw materials	1,220,337,000	235,525,041	470,862,000	90,876,366
Manufactured articles	309,897,000	59,810,121	945,691,000	182,518,363
Postal packages	.....	.....	82,427,000	15,908,411
Total	1,974,990,000	381,173,070	1,832,994,000	353,767,842

Imports and exports according to countries.

Countries.	Imports.		Exports.	
	Francs.		*Francs.*	
Russia	86,612,000	.....	9,769,000	.....
England	251,572,000	.....	589,584,000	.....
Germany	145,885,000	.....	184,355,000	.....
Belgium	139,129,000	.....	269,063,000	.....
Switzerland	40,868,000	.....	88,703,000	.....
Italy	68,107,000	.....	70,194,000	.....
Spain	105,204,000	.....	50,579,000	.....
Turkey	48,277,000	.....	22,663,000	.....
United States	218,761,000	$42,220,873	140,768,000	$27,168,224
Brazil	44,526,000	.....	27,435,000	.....
Argentine Republic	146,733,000	.....	27,180,000	.....
Other countries	679,316,000	.....	352,501,000	.....
Total	1,974,990,000	.....	1,832,994,000	.....

Brussels as a Seaport.—A report published in the Revue du Commerce Extérieur, Paris, August 7, 1897, says:

The project of making Brussels a maritime port, which has long been under consideration, is about to be realized. A basin of 12 hectares (29.652 acres) is to be constructed, with a depth of some 18 feet, and two large quays at which vessels can touch. Ample freight accommodations will be provided, and the port will be equipped with the latest improvements in the way of machinery, etc. Branch lines will lead from the quays to the railway stations. It is expected that a large extension of industry and commerce will result from these improvements.

Commercial Travelers in Sweden.—The following paragraph is from the Revue du Commerce Extérieur, Paris, August 7, 1897:

According to Swedish law, licenses for commercial travelers have been issued for calendar months, dating only from the first of each month. In this way, the tax of 100 crowns ($26.80) did not give the traveler the right to exercise his profession during thirty consecutive days from the time of payment; if busy only on the last day of the month, he would still be subject to the tax. Many requests have been made by the representatives of foreign governments for the reform of this legislation, and the Swedish Government has finally taken action. According to a new royal ordinance, which will take effect January 1, 1898, the calendar month will be replaced by the month of thirty consecutive days, so far as the validity of commercial licenses is concerned.

Fruit Trade in Germany.—In the Moniteur Officiel du Commerce, Paris, May 27, 1897, the following appears:

During the last three years, the quantity of fresh fruit imported into Germany has been as follows: In 1894, 116,033 tons; 1895, 117,452 tons; 1896, 104,604 tons.

Figures showing comparative imports for the last two years, according to countries, are:

Countries.	1895.	1896.
	Tons.	*Tons.*
Austria-Hungary	52,408	35,078
Holland	25,018	15,333
Belgium	15,316	18,696
Switzerland	4,144	12,135
North America	719	7,820
France	12,574	5,168
Italy	3,163	4,163

The increase of the exports from Switzerland and the appearance for the first time of large quantities of American fruit upon the German markets are the most notable facts concerning the trade for 1896. The total quantity of apples sent from America to Europe during the past year was 1,720,803 tons, while the average for the past ten years has been only 897,000 tons; that is to say, the exports almost doubled. British ports—Liverpool, London, and Glasgow—and Bremen and Hamburg receive most of these imports. American apples have been very well received both in Berlin and Hamburg. The importation of dried fruits was as follows: In 1894, 34,339 tons; 1895, 37,665 tons; 1896, 41,505 tons. According to countries, the imports were:

Countries.	1895.	1896.
	Tons.	*Tons.*
Servia	15,268	13,227
Austria-Hungary	12,858	16,424
France	2,153	1,625
United States	5,262	8,412
Italy	526	528
Holland	873	580

Here, again, the increase of exports from the United States is to be noted, especially in view of the diminution in the quantities received from Servia and France. They consist principally of dried apples, cored and sliced in the shape of rings, from which they have received the name of "apfelringe." The value of the imports of fresh and dried fruit into Germany amounts to almost 38,000,000 marks ($9,044,000), and the exports from that country hardly reach the figure of 4,000,000 marks ($952,000). The opening for American fruit, if the present standard and prices are maintained, appears to be excellent.

Public Works Projected in Roumania.—The Revue du Commerce Extérieur, Paris, August 7, 1897, says:

The Roumanian Government is planning to construct a new railway between Constantza and the Danube. A new system of waterworks for the same city is also under consideration (there is practically no drinking water), and other works of less importance. It is expected that a large Government building will be erected, comprising court rooms, offices, banking accommodations, etc. Two light-houses will be constructed on the coast between Constantza and Bulgaria.

Commercial Movement of Cyprus in 1895.—In the Moniteur Officiel du Commerce, Paris, June 3, 1897, the following report appears:

The total value of the imports into Cyprus during the year 1895 was 6,112,217 francs ($1,179,657), a decrease of over 300,000 francs as compared with that of 1894. England sent nearly 30 per cent of the imports; Turkey, over 25 per cent; Austria and Egypt, 14 per cent each; France, 7⅓ per cent; and Greece, 3⅓ per cent. The chief articles imported were coffee, sugar, tobacco, cotton thread, cotton and woolen tissues, building wood, and leather. The exports amounted to the value of 6,502,708 francs ($1,255,022), an increase of 149,000 francs over the previous year. England and Egypt received each 27.64 per cent of the exports; Turkey, 18 per cent; France, 16.57 per cent; Austria, 4.25 per cent; and Italy, 3.74 per cent. Carob beans, wheat, oats, wines, fruits, and living animals were the principal articles of export. The United States received 1,111 francs' ($214) worth of exports.

The Commercial Future of Tunis.—The Bulletin de la Société de Géographie Commerciale, Paris, Vol. XIX (Nos. 6 and 7), has the following:

Before the establishment of the protectorate, the commerce of Tunis did not exceed 23,000,000 francs ($4,439,000). In 1886, this amount was more than doubled; in 1895, it reached the figure of 85,000,000 francs ($16,405,000), of which 48,000,000 francs ($9,264,000) represented the imports. The chief articles of export are cereals, olive oil, cattle, alfalfa, sponges, ores, and wines. Cereals represent about one-third of the total export. The chief imports in 1895 were as follows: Tissues, 8,000,000 francs ($1,544,000), from France, England, and Germany; flour, 5,000,000 francs ($965,000), almost entirely from Marseilles; colonial products, 3,800,000 francs ($733,400), from France, Australia, and Italy; machinery and tools, 1,300,000 francs ($250,900), from France and Belgium; wood and articles thereof, 1,200,000 francs ($231,600), from Norway and Sweden; materials for construction, 1,190,000 francs ($229,670), from France, except in the case of marble, which came from Italy; skins and articles of leather, 1,500,000 francs ($289,500), from France; wines and spirits, 1,800,000 francs ($347,400), from France and Italy; coal, 600,000 francs ($115,800), from England; mineral oils for lighting, 570,000 francs ($110,010), from America and Russia, via Italy and Malta.

The production of cereals must increase, since new and improved methods of agriculture are being employed, and large tracts of ground hitherto uncultivated are now being developed. Before long, 123,550 acres will be planted in olives, and the average production of oil will be 1,589,000 gallons. Larger numbers of cattle will also be raised. The soil and climate of Tunis are adapted to the cultivation of early fruits, medicinal plants, etc. The exploitation of mineral ores, especially the rich deposits of Gafsa, waits only the establishment of good roads to become important. Since 1891, the number of French inhabitants has increased 1,300 annually.

Foreign Commerce of Egypt in 1896.—A report published in the Moniteur Officiel du Commerce, Paris, May 27, 1897, is as follows:

The total value of the imports into Egypt during the past year was 251,467,700 francs ($48,533,266), an increase of over 37,000,000 francs as compared with the pre-

ceding year. This increase was in spite of the fact that a large number of people left the country on account of the prevalent epidemic. The cotton season was sufficiently good to insure prosperous conditions. The countries from which Egypt imported were:

Countries.	Value.	
	Francs.	
England and possessions	95,900,000	$18,508,700
Turkey	51,600,000	9,958,800
France and possessions	31,400,000	6,060,200
Austria-Hungary	18,200,000	3,512,600
Belgium	11,900,000	2,296,700
Russia	9,600,000	1,852,800
Italy	8,600,000	1,659,800
Germany	7,300,000	1,408,900
Greece	2,100,000	405,300
America	2,060,000	397,580
Norway and Sweden	2,040,000	393,720
China and the far East	2,030,000	391,790
Persia	1,500,000	289,500
Roumania	1,300,000	250,900
Morocco	700,000	135,100
Holland	180,000	34,740
Spain	48,000	9,264

Turkey sends tobacco and wood. Less wood has been received from Sweden than during the previous year; on the other hand, the import of wood from Roumania has increased. The chief articles imported into Egypt were flour, coal, iron and manufactures, tobacco, cotton tissues, cotton thread, woolen tissues, wine, raw silk and silk thread, sacks, ordinary soap, petroleum, indigo, coffee, cheese, foot wear of various kinds, butter, beer, and liqueurs. The greatest gain has been in cotton tissues, woolen tissues, iron and articles thereof, and flour.

The value of the exports was 343,780,800 francs ($66,349,694), some 15,000,000 francs more than during 1895. There were exported 183,000,000 francs' ($35,319,000) worth to England and possessions; to Russia, 38,000,000 francs ($7,334,000); to France and her possessions, 31,000,000 francs ($5,983,000); to the United States, 24,000,000 francs ($4,632,000); to Austria-Hungary, 15,000,000 francs ($2,895,000); to Italy, 9,000,000 francs ($1,737,000); to Turkey, 9,000,000 francs ($1,737,000); to Germany, 8,000,000 francs ($1,544,000); to Spain, 7,000,000 francs ($1,351,000); to Belgium, 600,000 francs ($115,800); to Greece, 390,000 francs ($75,270); to China, 320,000 francs ($61,760); and to Roumania, 120,000 francs ($23,160). The principal articles of export, besides cotton, which represented over two-thirds of the total, were cane sugar, beans, wheat, onions, skins, and natural wool. There was a notable reduction in the export of maize. Cotton and cane sugar showed the principal increase.

Commerce of Lourenco Marquez in 1896.—The Revue du Commerce Extérieur, Paris, August 7, 1897, says:

The increased commercial movement of the port during the last year is due in part to the development of the railway. The imports of merchandise destined for the Transvaal still represent the bulk of the trade. The total value of the commerce in 1896 was over 50,000,000 francs ($10,000,000), more than twice that of 1895. About one-fourth of the trade was with Portugal, a marked increase over that of

the preceding year. The import of chemical products ($500,000 worth) was twelve times that of 1895. Ready-made clothing also constitutes an important item, the better qualities coming from England and the cheaper ones from Germany and Belgium. The natives of South Africa buy this class of goods largely. The population of the port at the end of 1896 consisted of 3,692 inhabitants, of whom 1,544 were Europeans, 764 Asiatics, and 1,384 natives.

The Moniteur Officiel du Commerce, Paris, June 3, 1897, publishes the following additional details:

The amount of money invested in real estate during the past year shows the progress made by the city. Over £150,000 ($729,975) has been spent in this way, and prices have advanced in a surprising manner. Land in the center of the city sells for from £10 to £20 ($48 to $96) per square meter (10.76 square feet). The total receipts of the railroad for 1896 were £148,350 ($721,945), an increase of £66,171 over 1895; 159,000 tons of merchandise were carried, against 88,000 tons in the preceding year. The length of the line is 55.3 miles. Lourenço Marquez is only 390 miles from Johannesburg, while the Cape is 1,060 miles distant from the same city. The location of Lourenço Marquez and the excellence of its harbor can not fail to promote its development.

Foreign Population of China.—In the Bulletin de la Société de Géographie Commerciale, Paris, Vol. XIX (Nos. 6 and 7), a report is published from which the following extracts are taken:

There are over ten thousand Europeans and Americans resident in China. The English head the list with 4,000; the Americans number 1,325; Germans, 882; French, 875; Portuguese, 805; Spaniards, 461; Norwegians, 375; Russians, 116; Italians, 108, etc. There are 669 Japanese. Twenty-two ports are open to foreign residence, that is to say, that Europeans are allowed to acquire conditional title to certain lands, on which they live, govern themselves, and have special privileges in judicial matters. The ports are Mengtz, Lung Chow, Pakhoi, King Chow, Lappa, Canton, Kowlon, Swatow, Amoy, Fuchau, Winchow, Ningpo, Shanghai, Chinkiang, Wuhu, Kiukiang, Hankow, Ichang, Chungking, Chefoo, Tientsin, and Niuchwang. It is to be noted that Peking does not appear on this list, although the embassies and legations are established there. The Chinese who find themselves under foreign jurisdiction appear more than contented with the situation, because, although taxes are high, they are fixed. Two hundred thousand natives live in the European settlements of Shanghai. Besides the foreign residents of China, a large number live in ports that have been ceded to other nations. For instance, Hongkong comprises in its civil population 4,195 Europeans and Americans. With the troops and sailors, this number is raised to 8,545. Hongkong is the actual capital of foreign industry in the far East. More than 3,000 vessels, with a tonnage of nearly 4,000,000, touch there annually. The same spirit which caused the development of Singapore, Colombo, and Hongkong is to be found in the foreign settlements of the open ports of China.

Mineral Resources of Kouang-Toung.—According to an article in the Bulletin de la Société de Géographie Commerciale, Paris, Vol. XIX (Nos. 6 and 7), there are many indications of mineral wealth in the province of Kouang-Toung, China. Coal is abundant, gold, sil-

ver, and copper have been found, and more iron ore than in any other province of the Empire. The mining industry in China has always been considered of less importance than that of agriculture. Little native capital has been invested in this manner; but, according to the terms of the Franco-Chinese convention of 1895, the French now have an opportunity of developing the mines.

The Cotton Season in India.—The Moniteur Officiel du Commerce, Paris, May 13, 1897, says that the cotton crop for the year 1896–97 will be 26 per cent less than that of the preceding year. The total is estimated at about 1,818,000 bales. Nearly as much land was under cultivation as in 1895–96, when the crop was unusually good. In Bombay, Berar, the territories of Nizam, and the central provinces, the decrease was most noticeable.

Foreign Trade of Siam in 1896.—The London and China Telegraph, London, July 6, 1897, has the following:

The Bangkok Times groups figures to show how the foreign trade of Siam grows year by year. Last year's exports show an increase of $5,082,214. Hongkong and Singapore took the greater part of the increase, but it is noteworthy that the direct trade with Europe shows a very marked increase, being now $1,209,827—over three times what it was in 1895. This is due, however, to rice being taken direct, and not to any increased export of teak wood. The only places that show a decrease are China, Rio de Janeiro, and Saigon. The quantity of rice exported is still going slowly downwards, as it has been since 1893. But, owing to the greatly enhanced price of this staple, there is an increase in the value of the amount exported that considerably more than accounts for the whole increase in the exports of the year. That, in fact, is the chief feature of the returns, for other things of importance are about an average. The increase was $6,443,352. Only $17,793 worth of gold left Bangkok in 1896, while the value in 1895 was $53,877. Diamonds, rubies, and precious stones only totaled little more than a third of the export of the previous year. The value of the bullock trade with Singapore increased from $403,095 to $460,294, representing an increased export of 4,421 head.

The imports show an increase of $1,659,815 over 1895 and nearly $4,000,000 over 1894. They are $9,318,584 less than the exports. There is a falling off of close on $500,000 in shirtings, and the same may be said of colored piece goods, turkey-red cloth, twists, and threads. Woolen goods have trebled in value; linen goods, prints, and chintz show increase. All forms of silk goods also show a marked increase.

The exports last year reached $30,362,000, to which Singapore contributed $10,399,000. The imports aggregated $21,044,000, of which Singapore accounted for $8,867,000.*

*According to a report from Consul-General Barrett, Bangkok, September 25, 1896, the average value of the silver dollar is about 53 cents of a gold dollar.

Commercial Condition of New South Wales in 1896.—The New South Wales Statistical Register, Part III, Sydney, 1897, shows that the total value of the imports into the colony for 1896 was £20,561,510 ($100,062,593). The imports from the United States amounted to £1,729,871 ($8,418,427), more than twice those for 1895. The exports were to the value of £23,103,349 ($112,434,447); and in the trade with the United States, £2,064,964 ($10,049,146), almost three times that of the preceding year. In both the import and export trade an increase was noted especially in the former. Wool represented 52.42 per cent of the total exports. The chief articles of import are wearing apparel, draperies, flour and wheat, sugar, and machinery. Flour and wheat and machinery show the most marked increase over the preceding year. The following is a table of the chief imports from the United States, the values being given in round numbers:

Articles.	Value.		Articles.	Value.	
Plows	£1,900	*$9,500	Musical instruments	£4,000	$20,000
Plow materials	1,400	7,000	Nails, bolts, etc. (iron)	2,000	10,000
Reapers and binders	2,800	14,000	Galvanized wire	9,000	45,000
Other agricultural implements	7,000	35,000	Jewelry and precious stones	2,000	10,000
Other machinery	51,000	255,000	Lamp ware	5,000	25,000
Sheep	1,000	5,000	Leather	24,000	120,000
Wearing apparel	6,000	30,000	Meat	8,000	40,000
Arms and ammunition	13,000	65,000	Onions	1,000	5,000
Dynamite	2,500	12,500	Paints and colors	4,000	20,000
Bicycles, tricycles, and parts	50,000	250,000	Paper, books, etc	48,000	240,000
Boots and shoes	40,000	200,000	Picture frames	2,900	14,500
Bottles	2,000	10,000	Plaster and plaster of paris	1,900	9,500
Building materials	1,600	8,000	Plate and plated ware	2,700	13,500
Carriages and materials	23,000	115,000	Playing cards	1,400	7,000
Chemical products	4,000	20,000	Preserves	8,000	40,000
Coffee	4,500	24,500	Printers' materials	3,000	15,000
Confectionery	1,700	8,500	Railway plant	2,000	10,000
Dentists' tools and materials	3,600	18,000	Resin	9,000	45,000
Drapery	7,800	39,000	Saddles and saddlers' ware	2,000	10,000
Drugs	20,000	100,000	Sausage skins	6,000	30,000
Dyes	3,000	15,000	Sewing machines	19,000	95,000
Fancy goods	2,000	10,000	Slates	7,000	35,000
Farinaceous and milk foods	1,000	5,000	Soap	10,000	50,000
Fish	35,000	175,000	Perfumes	1,400	7,000
Fruit	11,000	55,000	Sarsaparilla	3,000	15,000
Furniture and upholstery	6,000	30,000	Tinctures	3,300	16,500
Glassware	2,000	10,000	Stationery	7,500	37,500
Glucose	6,000	30,000	Materials for telegraphs, etc.	1,400	7,000
Flour	260,000	1,300,000	Timber	118,000	590,000
Maize	3,000	15,000	Tobacco	110,000	550,000
Wheat	445,000	2,225,000	Various tools	39,000	195,000
Grease	2,900	14,500	Turnery and wooden ware	3,400	17,000
Grindery	4,000	20,000	Turpentine	8,000	40,000
Hardware and ironmongery	33,000	165,000	Typewriters	12,000	60,000
Hops	9,000	45,000	Varnish	1,400	7,000
India-rubber goods	4,000	20,000	Watches and clocks	10,000	50,000
			Wax	5,000	25,000

* In this table the reductions are made in round numbers, $5 to the pound; the exact value of the pound is $4.8665.

Among other articles of less importance may be mentioned bee-keepers' material, blacking and shoe polish, brush ware and brooms, brass ware, ale and beer, horses, cheese, china ware, cutlery, cotton, gas fittings, gloves, barley, beans, bran, pease, oatmeal, oats, scientific instruments, marble, oils, photographic materials, pickles, plants, satchels, silks, seeds, tinware, whisky, vegetables, and wines.

The Government statistician, in a report on the wealth and progress of New South Wales, Sydney, 1897, says that the trade of the colony is larger than that of any other in gross amount, but it is exceeded by the commerce of Western Australia, South Australia, and Queensland in value per head of population. Until 1892, the United States was the largest foreign market of the colony, the value both of the imports and exports far exceeding that of any other country; but the direct shipments of wool to Europe, which are steadily increasing, have placed it below France and Germany. The exports to the United States are chiefly confined to specie and a few articles of raw material, such as coal, tin, wool, and marsupial skins. The production of gold in 1896 was £1,073,360 ($5,223,506). The number of miners employed in 1895 was 21,434. New South Wales has rich deposits of iron ore, and it is probable that this industry will become very important, as the average yearly import of iron and manufactures thereof for the past four years has exceeded the value of £2,000,000. During the year 1895, 3,738,589 tons of coal were raised. There are 2,616 miles of railway. New South Wales possesses immense areas of land now devoted to sheep raising that could be much more profitably used for wheat cultivation. Only about 0.7 per cent of the total area of the colony is actually devoted to the growth of agricultural produce. Another industry which would prove very profitable if developed is the fisheries.

Economic Situation of Victoria in 1896.—A report appearing in the Moniteur Officiel du Commerce, Paris, July 1, 1897, is as follows:

The drought (with which the Australian continent is always threatened), was responsible in 1896 for the decrease of exports. For three years the balance of trade has been in favor of Victoria, but during the last year the imports exceeded the exports. The chief increase in imports was noted in those articles in favor of which reduced tariff rates took effect January 1, 1896. The total imports were £14,846,579 ($72,250,876) and the exports £14,198,518 ($68,097,087). Victoria imported £2,500,000 ($12,166,200) worth of wool and exported £4,900,000 ($23,845,850) worth; imported £194,000 ($944,101) worth of coal, and exported £874,000 ($4,253,121) worth of butter, £178,000 ($865,247) worth of frozen mutton and £180,000 ($875,970) worth of grease. Wool is imported in transit from New South Wales to Melbourne, where it is shipped. The net export of wool from Victoria was nearly £2,400,000

($11,679,600). For the first time since butter was exported, the quantity was less than that sent from the country during the preceding year. The export of cheese also decreased, representing only two-fifths of its value in 1895. The net export of grain and flour fell from £544,000 ($2,647,376) in 1895 to £29,800 ($145,011) in 1896. On the other hand, the production of the gold mines has somewhat increased. The following table shows the highest and lowest quantities extracted from the mines since they were first worked:

Year.	Quantity.	Year.	Quantity.
	Ounces.		*Ounces.*
1851	212,899	1878	758,040
1853	2,744,098	1882	864,610
1854	2,218,483	1887	617,751
1856	3,053,744	1888	625,026
1867	1,501,446	1891	576,399
1868	1,684,918	1896	805,087

Since 1891, the refuse of abandoned mines (estimated at 40,000,000 tons) has been treated with cyanuration. Frequently, the mine was insufficiently or ignorantly exploited, and this new method promises to be remunerative. An establishment at Maldon paid the expenses of construction, etc., within two months from the profits gained in this way. The coal production during the year was 226,562 tons. The quantity of coal imported is decreasing annually.

Foreign Commerce of Western Australia in 1896.—The Moniteur Officiel du Commerce, Paris, July 29, 1897, publishes the following:

The total imports of Western Australia in 1896 amounted to £6,493,557 ($31,639,905), of which £950,370 was in coined gold. The exports were only £1,650,226 ($8,029,824). Wool figured for £267,506 in the exports, and wood for £116,420. The excess of imports over exports is due partly to the money borrowed by the colony and the capital introduced by immigrants. Authorities say that the future of Western Australia, according to the present outlook, depends upon the quantity of gold produced.

55TH CONGRESS, 1st Session. } HOUSE OF REPRESENTATIVES. { Doc. No. 91, Part 3.

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NOVEMBER, 1897.

COMMERCE, MANUFACTURES, ETC.

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1897.

THE BUREAU OF FOREIGN COMMERCE.

From and after July 1, 1897, the Bureau of Statistics, Department of State, will be known as the Bureau of Foreign Commerce, in accordance with the following order of the Secretary of State:

DEPARTMENT OF STATE,
Washington, July 1, 1897.

Under the authority conferred upon me by chapter 268, United States Statutes at Large, Fifty-fourth Congress, second session, under the heading "Publication of Diplomatic, Consular, and other commercial reports," the name of the Bureau of Statistics of this Department is hereby changed to the Bureau of Foreign Commerce, and the title of the Chief of the Bureau of Statistics shall hereafter be Chief of the Bureau of Foreign Commerce.

JOHN SHERMAN,
Secretary of State.

The reasons for the change are set forth in the following report from the Chief of the Bureau of Statistics to the Secretary of State

DEPARTMENT OF STATE,
Washington, June 30, 1897.

Honorable JOHN SHERMAN,
Secretary of State.

SIR: I have the honor to call your attention to the clause in the diplomatic and consular appropriation bill for the fiscal year ending June 30, 1898, approved February 20, 1897, which provides for the publication of diplomatic, consular, and other commercial reports. (See page 590, United States Statutes at Large, Fifty-fourth Congress, second session.) The paragraph reads as follows:

Preparation, printing, publication, and distribution, by the Department of State, of the diplomatic, consular, and other commercial reports, twenty-five thousand dollars; and of this sum the Secretary of State is authorized to use not exceeding three thousand one hundred and twenty dollars for services of employees in the Bureau of Statistics, Department of State, in the work of compiling and distributing such reports, and not exceeding two hundred and fifty dollars in the purchase of such books, maps, and periodicals as may be necessary to the editing of diplomatic, consular, and other commercial reports: Provided, That all terms of measure, weight, and money shall be reduced to, and expressed in, terms of the measure, weight, and coin of the United States, as well as in the foreign terms; that each issue of consular reports shall not exceed seven thousand copies: And provided further, That the Secretary of State be, and he is hereby, authorized to change the

name of the Bureau of Statistics to the Bureau of Foreign Commerce, and that the foregoing provision shall apply with the same force and effect to the Bureau of Foreign Commerce as to the Bureau of Statistics.

You will perceive that the Secretary of State is authorized by the foregoing to change the name of the Bureau of Statistics of this Department to the Bureau of Foreign Commerce, and that the provision for the maintenance of the Bureau of Statistics is made to apply with the same force and effect to the Bureau of Foreign Commerce. As the appropriation becomes available on the 1st of July, I respectfully ask authority from you to carry the legislation specified into effect. The reasons for making the change, as stated to Congress and approved by that body, are:

(1) The confusion arising from the fact that there are three bureaus of statistics in the Executive Departments, viz:

Bureau of Statistics, Department of State;

Bureau of Statistics, Treasury Department;

Division of Statistics, Department of Agriculture.

Shortly after taking charge of this Bureau, I became impressed with the fact that the general public was unable to discriminate between the various bureaus of the same name, and that unnecessary labor and delay resulted.

(2) The name Bureau of Statistics does not properly denote the functions of this Bureau, which is exclusively commercial in its character, its work being that of collecting, compiling, and distributing the commercial reports of our diplomatic and consular officers. There is a wide range of statistics with which the Bureau has nothing to do, and its designation as a Bureau of Statistics is, therefore, misleading. The use of the words Bureau of Foreign Commerce, on the other hand, besides correctly indicating the character of the work, is likely, in my judgment, to impress upon the public mind the importance of the commercial functions of this Department.

In view of these considerations, I submit the draft of an order for your signature.

Respectfully yours,

FREDERIC EMORY,
Chief, Bureau of Statistics.

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Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to April 1, 1897, have been prepared to assist in computing the proper values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz, (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*.	Gold and silver..	Peso.....	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc.....	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil.....	Gold	Milreis.....	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	.....do	Dollar.....	1.00	
Chile.....	.....do	Peso.....	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica.....	.....do	Colon.....	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	.....do	.92,6	Gold—doubloon ($5.01,7); silver—peso.
Denmark	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Egypt.....	.....do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	.....do	Mark.....	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark.....	.23,8	Gold—5, 10, and 20 marks.
Great Britain.....	.....do	Pound sterling...	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver..	Drachma.....	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	.....do	Gourde.....	.96,5	Silver—gourde.
Italy.....	.....do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Japan‡.....	Gold.....	Yen.....	.99,7	Gold—1, 2, 5, 10, and 20 yen.
Liberia	.....do	Dollar.....	1.00	
Netherlands§.....	Gold and silver..	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar.....	1.01,4	Gold—$2 ($2.02,7).
Portugal.....	.....do	Milreis.....	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖.....	.....do	Ruble.....	.77,2	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain.....	Gold and silver..	Peseta.....	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster.....	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela.....	Gold and silver..	Bolivar.....	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875, the gold standard prevailed in the Argentine Republic.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ended July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

‡ For particulars as to the change from silver to the gold standard, see CONSULAR REPORTS No. 201, p. 259.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

‖ Russia: Gold the nominal standard; silver the actual standard.—*Note by the United States Treasury.* See, also, review of Russian industries and commerce by the Russian Minister of Finance in "Review of the world's commerce," Commercial Relations of the United States for 1895-96, p. 230.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6	.....	.....
China	Silver	Haikwan tael	1.61	1.61	.....	.....	.....	.....
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	.....	.....
	Silver		.....	.....	.....	.....	.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso	.....	.....	.....	.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	.....	.....	.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

* The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

† The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1894.				1895.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.51,6	$0.46,5	$0.45,7	$0.46,4	$0.45,5	$0.44,1	$0.48,6	$0.48,6
Central America.*	Silver peso	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
China†	Shanghai tael	.76,2	.68,6	.67,6	.68,5	.67,3	.65,2	.71,8	.71,8
	Haikwan tael	.84,9	.76,5	.75,3	.76,3	.74,9	.75,6	.80	.80
	Tientsin tael	.....	.....	.....	.72,7	.71,4	.69,2	.76,1	.76,2
	Chefoo tael	.....	.....	.....	.71,7	.70,4	.68,3	.75,1	.75,2
Colombia	Silver peso	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
Ecuador	...do...	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
India	Silver rupee	.24,5	.22,1	.21,7	.22	.21,6	.21	.23,1	.23,1
Japan‡	Silver yen	.55,6	.50,1	.49,3	.50	.49,1	.47,6	.52,4	.52,4
Mexico	Silver dollar	.56	.50,5	.49,7	.50,4	.49,5	.47,9	.52,8	.52,8
Persia	Silver kran	.....	.....	.....	.....	.....	.....	.08,9	.09
Peru	Silver sol	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
Russia§	Silver ruble	.41,3	.37,2	.36,6	.37,1	.36,4	.35,3	.38,9	.38,9
Tripoli	Silver mahbub	.46,5	.41,9	.41,3	.41,8	.41,1	.39,8	.43,8	.43,8

Countries.	Monetary unit.	1896.				1897.		
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.
Bolivia	Silver boliviano.	$0.49,1	$0.49,3	$0.49,7	$0.49	$0.47,4	$0.46,8	$0.44,3
Central America*	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,5	.44,3
China†	Amoy tael	.....	.....	.....	.79,3	.76,7	.75,7	.71,7
	Canton tael	.....	.....	.....	.79	.76,5	.75,5	.71,5
	Chefoo tael	.75,9	.76,3	.76,9	.75,8	.73,3	.72,4	.68,6
	Chinkiang tael	.....	.....	.....	.77,4	.74,9	.73,9	.70
	Fuchau tael	.....	.....	.....	.73,3	.70,9	.70	.66,3
	Haikwan tael	.80,8	.81,2	.81,9	.80,6	.78	.77	.73,1
	Hankow tael	.....	.....	.....	.74,2	.71,7	.70,8	.67,1
	Ningpo tael	.....	.....	.....	.76,2	.73,7	.72,8	.68,9
	Niuchwang tael	.....	.....	.....	.74,3	.71,9	.71	.67,2
	Shanghai tael	.72,5	.72,9	.73,5	.72,4	.70	.69,1	.65,5
	Swatow tael	.....	.....	.....	.73,2	.70,8	.69,9	.66,2
	Takao tael	.....	.....	.....	.79,8	.77,2	.76,2	.72,2
	Tientsin tael	.76,9	.77,3	.78	.76,8	.74,3	.73,4	.69,5
Colombia	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3
Ecuador	...do...	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3
India	Silver rupee	.23,3	.23,4	.23,6	.23,3	.22,5	.22,2	.21,1
Japan‡	Silver yen	.52,9	.53,2	.53,2	.52,8	.51,1	.50,5	.....
Mexico	Silver dollar	.53,3	.53,6	.54	.53,2	.51,5	.50,8	.48,2
Persia	Silver kran	.09	.09,1	.09,2	.09	.08,7	.08,6	.08,2
Peru	Silver sol	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3
Russia§	Silver ruble	.39,3	.39,5	.39,8	.39,2	.37,9	.37,4	.....
Tripoli	Silver mahbub	.44,3	.44,5	.44,9	.44,2	.....	.....	.....

*Costa Rica and British Honduras have the gold standard (see table showing countries with fixed currencies).

†China (silver). The haikwan tael is the customs tael. The "British dollar" has the same legal value as the Mexican dollar in Hongkong, the Straits Settlements, and Labuan.

‡Japan has adopted the gold standard (see CONSULAR REPORTS No. 201, p. 259).

§The Treasury Department, in its estimates of foreign values for the quarter ended July 1, 1897, gives Russia the gold standard, and in a footnote says: "Gold is the nominal standard, silver practically the standard." To appreciate the complicated state of Russian currency, see CONSULAR REPORTS No. 188, pp. 34-40, and Special Consular Reports, Money and Prices in Foreign Countries, part 2, pp. 381-400.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Dun	Japan	1 inch.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	4 yards.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Kota	Japan	5.13 bushels.
Korree	Russia	3.5 bushels.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	113⅜ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅞ acres.
Marc	Bolivia	0.507 pound.
Maund	India	82⅔ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	3.6 feet.
Seer	India	1 pound 13 ounces.
Shaku	Japan	10 inches.
Sho	....do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	....do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	....do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	....do	1.22 acres.
Vara	Argentine Republic	34.1208 inches.
Do	Castile	0.914117 yard.
Do	Central America	38.874 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.
Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

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FOREIGN VIEW OF UNITED STATES TIN PLATE.

Consul Parker sends from Birmingham, under date of July 21, 1897, a report on the "American Tin-Plate Industry and the Welsh Tin-Plate Export Trade to the United States," made to the British ambassador at Washington, Sir Julian Pauncefote, by the second secretary, Mr. Hugh J. O'Beirne. "The report," says the consul, "contains a review of the establishment and growth of this industry in the United States, written from the point of view of an official from another country, who has evidently made a careful study of it in its relations to the trade of the whole world. It will, I venture to think, give our manufacturers and consumers a fair idea of the conditions surrounding this trade. I also send an editorial article, cut from the columns of the Daily Post, of this city, a paper which keeps itself closely in touch with all the metal industries. This is in the nature of speculation as to the effect upon British industries of business and legislation in the United States, and is thus, in some degree, a complement to the official report."

In the report (Foreign Office, 1897, Miscellaneous Series, No. 426), Mr. O'Beirne says the tin-plate industry in the United States dates practically from the passage of the McKinley Act of October 1, 1890, at which time the United States market was wholly supplied by South Wales. The production of tin and terne plate developed rapidly under the influence of the new tariff, the output for the three years ended June, 1892, 1893, and 1894 being, according to the estimate of the special agent of the Treasury, some 13,000,000 pounds, 99,000,000 pounds, and 139,000,000 pounds, respectively. Under the Wilson law of 1894, the import duty was reduced to 1⅛ cents per pound, or only one-fifth of a cent higher than the ante-McKinley rate. The industry, however, was by this time firmly established and continued to develop, showing an output of 193,000,000 pounds

and 307,000,000 pounds, respectively, for the years ended June, 1895 and 1896.

Mr. O'Beirne cites figures to show that the complete expulsion of British plates from the United States market is regarded as only a matter of time. He adds, however, that the importation of British plates with rebate of duty by American canned-goods exporters, which has formed a very important branch of the Welsh trade with the United States in late years, is likely to remain as large as ever.

Speaking of the low price of American steel bars for making tin plate, Mr. O'Beirne says:

> One of the chief causes contributing to this remarkable fall—the depressed condition of business enterprise which has affected all American trade during the past four years—is, of course, purely temporary. The contraction of business undertakings in all directions has told with especial force on the iron market, which, after a brief revival in 1895, has relapsed into a state of stagnation. While the demand for iron and steel was curtailed one-half, the output of iron ore continued much as before, and stocks accumulating at the furnaces have forced the price of pig iron down to a figure hitherto unknown. It need hardly be said, with regard to this part of the question, that returning activity of capital, bringing with it an increased use of metals in America, would have an immediate effect in altering the situation
>
> A second leading factor in lowering the price of American steel has been the progress made of late years in reducing the cost of production in America in respect alike of labor, freight, and fuel, and it should be noticed that the appliances by which this result has been attained are in great part not such as will serve to reduce the cost in England in an equal degree, and must, therefore, permanently affect the relations between the prices in the two countries.
>
> As is well known, the chief natural disadvantage with which the American ironmaster has to contend is the distance often separating the ores from the available fuel—a good instance in point being the great iron-making industry in the coal region of western Pennsylvania, which draws its supplies of ore chiefly from Michigan. This disadvantage has been lately diminished by the reduction of freightage on lakes, rivers, and canals, with improved facilities of shipping, and by an appreciable lowering of railway rates. It has also, to some extent, lost importance, as, with greater economy of fuel, the weight of coal consumed per ton of ore has been reduced, and there has been an increasing tendency to carry the fuel to the ores instead of the ores to the fuel. The economy recently effected by American ironmasters in the use of fuel in smelting furnaces has been widely noticed in England; the result has been attained partly through improvements of plant, which can not, of course, be the monopoly of either side of the Atlantic, but partly also through the largeness of the scale on which it is possible to operate where, as is so generally the case in America, vast capitals are concentrated in the hands of individuals and companies. But the success of American engineers in minimizing the employment of labor is of even greater importance in the present connection, since labor-saving inventions are more effective than any other form of economy in lowering the American relative cost of production by lessening the importance of the element of cost, in respect of which the American maker is at the greatest disadvantage. Perhaps the most notable performance of this kind has been the great reduction made in the cost of mining hard iron ores by the extended use of machinery to replace labor in mining, which, with the lowering of freights, has immensely cheapened the ores delivered at the furnace.

Mr. O'Beirne concludes, in view of the facts stated, "even," as he says, "without going into the question of the increasing cost of steel production in Great Britain," that the American tin-plate manufacturers are likely to retain, at any rate in part, their present advantage in regard to cheapness of steel material. While the extreme depression of American steel has no doubt been brought about partly by causes which are purely temporary, there has also been a reduction of the American, relatively to the British, cost of production, which must permanently alter the relation between the two prices; and, therefore, although a rise in American steel is to be expected with improving trade conditions, Mr. O'Beirne thinks it can not permanently return to the position toward the English metal which it occupied before 1892.

The newspaper editorial to which Consul Parker refers is as follows:

[From the Birmingham Daily Post, July 2, 1897.]

The rapid growth of manufacturing competition in the United States, to which we referred the other day as a more serious menace to our commercial supremacy than the much-debated competition of Germany, is strikingly brought out in an interesting consular report just issued by the Foreign Office. It is by Mr. O'Beirne, second secretary of the British embassy in Washington, and it treats of the development of the American tin-plate industry, more particularly in its relations with the industry of South Wales. That the American manufacture, which dates practically from the passing of the McKinley tariff in October, 1890, had struck root and prospered under the sheltering influence of high protective duties, we were, of course, aware; but few even among our tin-plate manufacturers, we suspect, had any idea of the huge proportions which this new industry has already attained in the United States. From a total of 13,000,000 pounds in 1892, the annual production rose rapidly to 139,000,000 pounds in 1894. Then came the more moderate duties under the Wilson law of 1894, when the Democrats succeeded to office; but by this time, the industry was firmly established, and it continued to grow by leaps and bounds, with a total production of 193,000,000 pounds in 1895 and of 307,000,000 pounds in 1896. The manufacture of black sheets rose concurrently from about 26,000,000 pounds for the year ended June, 1892, to 334,000,000 pounds for the corresponding period ended 1896, when practically the whole of the tin and terne plate produced in the United States was made out of American sheets. While some of this marvelous growth was, doubtless, referable to the increased consumptive requirements of the country, the greater part of it was obtained at the expense of our trade, as will be evident from the marked and rapid decline of our exports to the United States. Thus, during the four years preceding the passage of the McKinley Act, the annual importation of British tin plates averaged 650,000,000 pounds. During the four years which followed the enactment of the higher tariff, the average fell to about 494,000,000 pounds, and for 1896 it was only a little over 385,000,000 pounds, or, say, about one-half the quantity taken by the United States six years ago. As a matter of fact, American tin plates now monopolize the market in the Eastern States, where they are selling at 1s. to 1s. 8d. a box less than Welsh plates of corresponding grades, and it is only in what are called "drawback" plates, or plates destined for the export oil and canned-goods industries of the United States, which enjoy a special rebate or bounty of 99 per cent on export, that our manufacturers are still

able to do a greatly diminished trade on the Atlantic side. On the Pacific Coast, however, there is still a fairly good market for Welsh plates, owing to the low water freights for goods of this description as compared with the heavy cost of transportation by rail from the manufacturing centers of the United States.

From the foregoing statistics, it would seem that we are now supplying little more than one-half the consumptive requirements of the United States, which, for 1896, were computed at something under 700,000,000 pounds, and that this trade is practically confined to the Pacific Coast markets and the canning industries which profit by the rebate. Two vital questions suggested by Mr. O'Beirne's report are, first, how much further this serious dislocation of our trade is likely to be carried under present conditions; and, in the second place, what, if any, changes are needed in our manufacturing processes to meet the competition.

It must be remembered that, although that competition is now practically confined to the United States, if we except a certain limited export of American plates to Canada, it is quite capable of meeting us by and by in other markets, and even invading our own country, as American pig iron and steel bars have lately been doing. The answers to these questions depend, in some measure, of course, upon the tariff changes which are now being incubated by Congress, but the general condition of trade and wages in the United States and possible improvements in our manufacturing processes are also important elements in the problem. With regard to the tariff, in the first place, it is now practically settled that the duty on tin and terne plates will be raised by two-tenths of a cent as compared with the old Wilson rate, and that increase is believed to be sufficient to meet the competition of Welsh exporters on the Pacific Coast; but, in deference to the representations of the canning interests, who protested loudly against the proposed abolition of the drawback or rebate which they previously enjoyed, the Senate has restored that provision, subject, of course, to the issue of the conference between the two Houses. Should this concession be confirmed, as seems not improbable, our tin-plate manufacturers may count, at all events, upon retaining the valuable trade, estimated at about 137,000,000 pounds per annum, which they still do with the members of the American canning industries; and even were that rebate disallowed, it is probable that a substantial trade would still remain to them, as the canners would arrange to circumvent the act by canning their goods in bond. For that purpose, of course, they would use the cheapest plates procurable, and, unless the American makers were prepared to sell at a loss, they could not, under present conditions, pretend to compete with our manufacturers either in bond or in duty-free markets. On the other hand, it seems only too probable that the larger moiety of our surviving trade with the United States, including our exports to Pacific markets, will be practically annihilated by the new tariff duties, unless there should be either a substantial increase in the cost of production in the United States or a substantial decrease in the cost of production in this country. With regard to the former contingency, there can be little doubt that the trade is at present a very lean one in the United States, owing to the comparatively high cost of labor there, and that it has only been possible to produce plates at a profit owing to the low prices of metal and fuel, resulting from the general trade depression. For some time past the price of steel has ruled lower in the United States than in this country, and in this item alone the American manufacturer is said to enjoy an advantage of 20 per cent over his Welsh competitor. Labor, as already stated, is dearer in the United States than in this country, so much so, indeed, that the average weekly earnings of the work people employed in the plate mills are said to be about double what they are in this country. Nevertheless, owing to the adoption of labor-saving appliances and improved methods of working, the American tin-plate manufacturers are able to

reduce this disparity very considerably, while at the same time they have contrived to effect a substantial economy in the consumption of fuel.

The net result of the drawbacks and advantages described appears to be that, under actual conditions, the manufacture of tin plate in the United States costs about 30 per cent more than in this country; that, at all events, is the difference between English and American quotations in the country of origin. From these data it is evident that, in spite of the large proportions it has attained, the American steel-plate industry is still in need of protection, and that it exists only by virtue of the tariff. This fact relieves us, of course, of the apprehension that, under present conditions, the American tin-plate manufacturers can ever become serious competitors of those of South Wales in outside markets; but we must bear in mind that the conditions of the trade in both countries are continually changing, and that the victory must ultimately remain with the one which is most successful in solving the problem of economical production. Labor, doubtless, is an important item of cost; but it is not the only one, and it behooves our manufacturers to see that they are not distanced by their American competitors in any of the mechanical processes. In this country, we believe producers are accustomed to concentrate all the power required for driving the mills in a pair of condensing engines with one large fly wheel, while the Americans, on the contrary, distribute the power by having an engine in each department. Then, again, the American makers content themselves with a single stand of hot rolls, while in this country we are accustomed to have a roughing stand of rolls to each finishing stand of hot rolls. The American mills, moreover, are said to be larger and stronger than those in general use in South Wales, and their productive capacity is supposed to be greater. We are not in a position to say how far the advantages claimed for the American mills are real, but our tin-plate manufacturers will assuredly make a great mistake if they do not investigate the matter for themselves, with a view to the adoption of any meritorious features in the mechanism or processes of their competitors. It is improbable that the course of trade will allow of any further cheapening at present—either of labor or material—in the United States; indeed, all the indications point in the other direction; but the increased duties which are threatened by the new tariff will assuredly be a potent weapon in the hands of American makers, and, if it is to be successfully met by British manufacturers, the latter can not afford to neglect any opportunity of economizing production. Although our makers have, happily, found in other countries a certain measure of compensation for the trade they have lost in the United States, the latter is still one of our most important markets for tin plates, and therefore worth fighting for.

FRENCH MILITARY AND NATIONALITY LAWS.

Mr. Henry Vignaud, secretary of the embassy at Paris, writes, under date of August 2, 1897, that American citizens of French origin often apply for information concerning their position in regard to the French military and nationality laws. Mr. Vignaud refers to previous communications on the subject from the embassy (one from Minister Reid, dated July 16, 1889, printed in Foreign Relations, 1890, p. 276, and two from himself, the first of which was dated April 7, 1892, and was printed in Foreign Relations, 1893, p. 295, and the second, dated August 22, 1893, was printed in Foreign Relations, 1893, p. 303).

An article in the civil code of the French law is to the effect that a Frenchman naturalized abroad does not cease to be French if he is still subject to military service in the active army, unless his naturalization was obtained with the consent of the French Government. It has always been uncertain whether the law applied to those who had failed to discharge their military obligations before the law was passed or simply to those who had committed that offense after the law was enacted; nor has it been clear as to what is meant by the "active army." The period of service there is only for three years, but from this army every Frenchman passes first into the reserve for seven years and then into the territorial army. It was not known whether the law applied to the first three years or to the whole time during which military services were due, both in the active army and the reserve. These points have now, by rulings of the French Government, been thus explained:

The law has a retroactive effect; it applies to those who have avoided military service and acquired other nationality before as well as after the law was enacted. The words "active army" mean both the active and the reserve of the active army, and the expression "if he is still subject to military service" applies to the date on which the naturalization was obtained.

Thus, a Frenchman naturalized abroad without the consent of his Government, if, at the date of his naturalization, he is still subject to military service in the active army or reserve, is amenable to the military laws. If he does not respond to the notice calling him to service, he is charged with "insoumission" (noncompliance with the military law), and if found within the jurisdiction of France, whatever his age may be, and no matter how long he has lived abroad, even if he left France when a baby, or was born abroad, if his father was French at the time, he is arrested as an "insoumis" and enrolled in the active army, the reserve, or the territorial army, according to his age.

After a Frenchman has been transferred to the territorial army, he does not need the consent of his Government to be naturalized abroad; and when naturalized in the United States under such conditions, an application through the embassy in Paris secures recognition of his American citizenship. Naturalization papers must accompany such an application. Applications for change of citizenship during the age when active military service is due are practically never granted; but consent is usually given to those who, having passed the age of service in the active army and reserve, can only be called for service in the territorial army, although their naturalization may have taken place while still belonging to the active army. Applications of this sort should be made direct to the Minister of

Justice by the interested parties, accompanied by a fee of 675 francs ($130.27) and a detailed statement. When granted, the name of the applicant is erased from the military lists. It is the rule of the embassy to decline making applications of this kind in behalf of those who are already in possession of their full American papers of naturalization; but it does not refuse its good offices to those who desire to secure the consent of their Government before having been naturalized.

UNITED STATES PRODUCTS IN GERMANY.

I transmit herewith a copy of a letter (modified in one unimportant instance), addressed by me on the 15th instant to Mr. J. A. Filcher, commissioner in charge, California exhibit, Hamburg, in obedience to his request that I should submit to him such general suggestions as, in my opinion, would be useful to California exporters and producers who were anxious to gain the German markets.

W. HENRY ROBERTSON,
Consul.

HAMBURG, *July 26, 1897.*

HAMBURG, *July 15, 1897.*

J. A. FILCHER, Esq.,
Commissioner in Charge, California Exhibit, Hamburg.

DEAR SIR: Referring to our many conversations as to the best methods to be adopted by our exporters for the introduction of American products into this and other European markets, I take the liberty of submitting for your consideration a few general suggestions.

Although I have long entertained the intention of doing so, it is only recently that I have requested the leading local commercial papers of this great city to announce to the business world that I am almost daily in receipt of numbers of inquiries from our country for the addresses of firms here who are importers, or possible importers, of American products of every description, and that I would be very glad to receive the names of such firms, with a list of the articles in which they deal, or might deal, in order that I might put them in connection with our own people. You would probably be surprised at the number of prompt and satisfactory letters which I have received in connection with this announcement, and it will doubtless gratify you to learn that it is the staple products of the State of California for which a preference has been most generally expressed, indicating beyond a doubt that there exists here a natural, valuable, and growing market for California products.

The step which your State has taken in sending such a creditable exhibit to the Horticultural Exposition now being held in this city (and which is generally conceded to be the finest that has ever taken place anywhere) is unquestionably in the right direction. I think you will agree with me, however, that it should be but the beginning, and that what is actually and primarily needed here is a permanent exposition of all products of your State that have any chance of gaining this market. I mean by this, that there should be an organized movement by California producers and exporters to open, in the free-port portion of this city, a permanent sample warehouse, in which could be constantly seen fair average specimens of the

articles to be sold. It is both natural and proper that Americans should engage in a healthy and spirited competition against each other in their own country, but in a new and difficult foreign field they should be organized and united.

Such a sample warehouse should be directed by some one thoroughly familiar with the resources and business conditions of your State and with the methods and costs of transportation. He should be assisted by an intelligent, reliable, and industrious person, equally familiar with the possibilities, methods, and needs of this and other European markets. This permanent exposition should be supported by your boards of trade and should be conducted upon liberal principles. Advertising in its most attractive forms should be employed. Thoroughly honest salesmen should be employed and agencies created. The province of the undertaking on this side should be restricted to the exhibition of goods, the establishment of reliable agencies, and the taking of orders to be referred to a committee in California. It is essential that those in charge here should have no interest whatever in the placing of the orders at home.

It is most important that all goods delivered should fully conform to the samples and to all prearranged conditions as to time of delivery. No articles should be sent here against which there can be a reasonable complaint of any sort on account of quality, healthfulness, etc. The idea that we can make a dumping ground of Europe for what we can not dispose of elsewhere must be abandoned. Our products, especially our food products, are fighting too unequal a battle in foreign markets at present for us to dispense with the greatest caution and vigilance as to what we send abroad.

The same credits should be conceded as are usual in this market, without regard to our methods of business at home. All goods should be carefully packed and exported to meet the European demands, without reference to American preferences or usages. Hamburg is an especially appropriate city for the creation of such an exhibit. It is the leading trade center of a country which is now one of our most formidable commercial rivals, and is, moreover, the greatest distributing point for the continent of Europe. Nowhere can the conditions and demands of other markets be better studied. The advantages offered by the free-port feature and the great warehouse system of this port render it especially suitable for such an enterprise.

What is true of Hamburg, however, applies as well to the other leading cities of Europe, where these little permanent exhibitions could be established with great advantage. The Philadelphia Museums are undoubtedly an excellent move in the right direction, showing our people, as they do, raw products, manufactured products, and where and how our manufacturers can best dispose of their wares; but they do not go far enough. They should arrange to likewise show foreigners our raw products, our manufactured products, and where best they can buy their goods. They should not wait for foreign buyers to come to us; they should show their samples here. Letters of inquiry to consuls, circulars, pamphlets, or other printed devices will not open up a trade. Such deaf-and-dumb salesmen can not be expected to succeed in these days of keen commercial competition. What is true of California products is true of all American products. They must be advertised through agents or they can not be sold.

Should I be left in charge of this consulate long enough, it is my intention to report in detail upon the prospects and possibilities of each of the several staple products of your State. In the meantime, I shall be most happy to render you, or those you represent, any information or service in my power and shall use my best efforts toward increasing the introduction abroad of all American goods.

I am, etc.,

W. HENRY ROBERTSON,
Consul.

ENGLISH TRADE WITH HAMBURG AND BREMEN.

The North German Lloyd Steamship Company have recently sold their "English line" of seven steamers of about 1,000 to 1,300 tons gross each to the Argo Company, of Bremen. I subjoin herewith a translation from the Weser Zeitung, which speaks of the sale, and also of the shipping relations between England and this port.

The following figures show that the improvements in the River Weser have resulted in a large increase in the incoming and outgoing European traffic: In 1886, 668,443 tons, valued at 173,952,129 marks ($41,400,606); 1896, 1,370,295 tons, valued at 307,790,788 marks ($73,254,207). A closer study of the subject will reveal the fact that the trade with Great Britain and Ireland has not increased perceptibly. This commerce in 1896 amounted to 345,140 tons, valued at 75,900,920 marks ($18,064,418), divided as follows: Imports, 256,381 tons, valued at 45,263,466 marks ($10,772,704), of which 214,965 tons was stone coal, with a value of 2,956,471 marks ($703,640); exports, 88,759 tons, valued at 30,637,454 marks ($7,291,714).

The English import into Hamburg for 1895 was ten times what it was into Bremen. Hamburg, of course, can thank her geographical position as well as the cheap water facilities of the Elbe for these conditions. Bremen has expended large sums in improving the River Weser, building docks, wharves, etc. Trade in this city is handicapped by the high freight charges. The large number of vessels employed between Hamburg and England has by competition reduced the freight rates much below those to Bremen.

The English freight trade with Hamburg has been carried by North German Lloyd steamers. This company has difficulties to surmount in the transoceanic trade and concluded to sell the seven vessels engaged in the English line to the Argo Steamship Company. This company has increased its capital stock from 800,000 marks ($190,400) to 2,500,000 marks ($595,000).

The North German Lloyd Company's steamers of the *Barbarossa* class are meeting with even better success in the cabin-passenger trade than the owners expected. They have put eighteen new cabins in each vessel. The reasons for the success appear to be the steadiness of the boats and cheapness and excellence of accommodation.

It is said that the express steamers *Havel* and *Spree* are to be lengthened and receive twin screws after this season.

GEORGE KEENAN,
Consul.

BREMEN, *July 12, 1897.*

UNITED STATES VS. GERMAN HOPS.

The latest report of the chamber of commerce of Middle Franconia (Nuremberg), the most important hop district of Germany, contains a number of statements concerning the German hop trade which are, I think, of interest to United States hop producers. I

have attempted to show in some of my previous reports that the American article is gradually driving German hops from the English market.* This is shown to be the case in the above-named report by statistics, and a fear is expressed that, owing to the increased duty, the American market will also be lost to the German article.

The report gives the following figures for the English foreign hop trade:

Imports into England.

From—	September to March—		
	1894–95.	1895–96.	1896–97.
	Cwts.	*Cwts.*	*Cwts.*
United States	118,000	124,000	88,000
Germany	61,000	46,000	43,000

The exports from Germany to the United States during the last hop season (1896–97) amounted to about 18,200 cwts., about the same quantity as during the season of 1895–96.

The following table gives further details:

German hop exports.

To—	1896.				1897.		
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.
	Cent.†	*Cent.*†	*Cent.*†	*Cent.*†	*Cent.*†	*Cent.*†	*Cent.*†
Belgium	826	5,602	6,344	4,486	2,588	1,778	1,396
Denmark	298	1,090	1,192	1,142	1,248	524	334
France	672	2,286	4,452	3,274	2,276	2,572	1,960
United Kingdom	736	8,306	11,880	9,190	4,626	5,456	3,036
Italy	14	58	82	252	44	76	38
Netherlands	94	978	1,890	1,440	1,476	1,478	226
Norway	48	290	578	188	96	76	114
Austria	184	1,496	1,340	1,168	666	432	374
Russia	312	3,082	1,396	1,730	400	116	218
Sweden	28	244	1,084	2,220	2,036	390	30
Switzerland	160	708	1,498	1,148	824	268	190
Argentine Republic	.....	154	42	48	214	82	10
Brazil	238	580	758	460	432	310	270
Chile	52	102	412	132	86	358	286
United States	318	1,594	4,370	5,564	4,380	1,350	696
British Australia	192	556	404	38	106	48	24
Other countries	138	542	852	520	764	322	428
Total	4,310	27,668	38,574	33,000	22,262	15,636	9,630

*See CONSULAR REPORTS No. 195 (December, 1896), p. 588.

†1 centner=110.24 pounds.

German hop imports during the same period were as follows:

From—	1896.				1897.		
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.
	Cwts.	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*
Austria	2,922	17,486	14,368	9,644	5,910	3,262	2,556
Russia	64	556	438	950	676	226	40
Other countries	246	468	246	148	60	6	26
Total	3,302	18,510	15,052	10,742	6,646	3,494	2,622

These figures show that the German hop import was 27,000 cwts. more in 1896–97 than in 1895–96, whereas the export was reduced by 37,000 cwts.

I had some conversation with two prominent hop merchants of this place, having branch houses in the United States, with reference to the foregoing report. They admitted that the new United States customs tariff would, in all probability, materially reduce the export of German hops to the United States. To make up for this loss, the branch houses will now turn their energies to the exportation of United States hops to European markets, particularly England, Belgium, and France.

LOUIS STERN,
Commercial Agent.

BAMBERG, *July 23, 1897.*

CALCIUM CARBIDE AND ACETYLENE GAS.

In answer to an inquiry from Dr. T. V. Hubbard, Atlanta, Ga., the Department of State sent, on May 5, 1897, instructions to consular officers in France and Germany to report on the manufacture of calcium carbide and acetylene gas. Reports have been received from Consular Clerk C. H. Day, of Berlin, dated May 24, 1897, and Consul-General Mason, dated Frankfort, May 24, 1897. Proofs have been sent to Dr. Hubbard.

REPORT BY CONSULAR CLERK DAY.

The popular idea that calcium carbide is a discovery of very recent times is incorrect. Quite the contrary; it is a product that has been known for many years, although it did not come into commercial prominence until 1894; therefore, it would probably be worth while to glance for a moment at its history before entering into a brief description of its production and properties.

It is a well-conceded fact that Davy had obtained calcium carbide

when he noted (Am. Chem. Phar., 23, p. 144) that a residuum containing aurate of potassium in combination with water generated an evil-smelling gas.

In 1862, Wöhler wrote, in the Annalen der Chemie und Pharmacie (124, p. 220):

> The mixture of zinc and calcium in combination with carbon will produce, through the agency of a very high temperature, a carbon calcium. The most remarkable peculiarity of this combination is that when it is brought into contact with water it decomposes into hydrate of lime and acetylene, the same carburetted hydrogen which was discovered by Davy.

In 1893, Travers (see Proceedings Chemical Society, 118, p. 15) heated a melted mixture of sodium, calcium chloride, and powdered retort graphite for ten minutes in an iron flask, and thereby produced a smelted product containing 16 per cent calcium carbide.

In the year 1894, Maissan (compt. rend., 1894, p. 501) produced calcium carbide by heating in an electrical oven 120 grams of oxide of calcium and 70 grams of sugar coal. The oven was heated to 3500° C. through a current of 350 ampères and 70 volts for from fifteen to twenty minutes. The product weighed about 150 grams. The reaction is shown in the following equations:

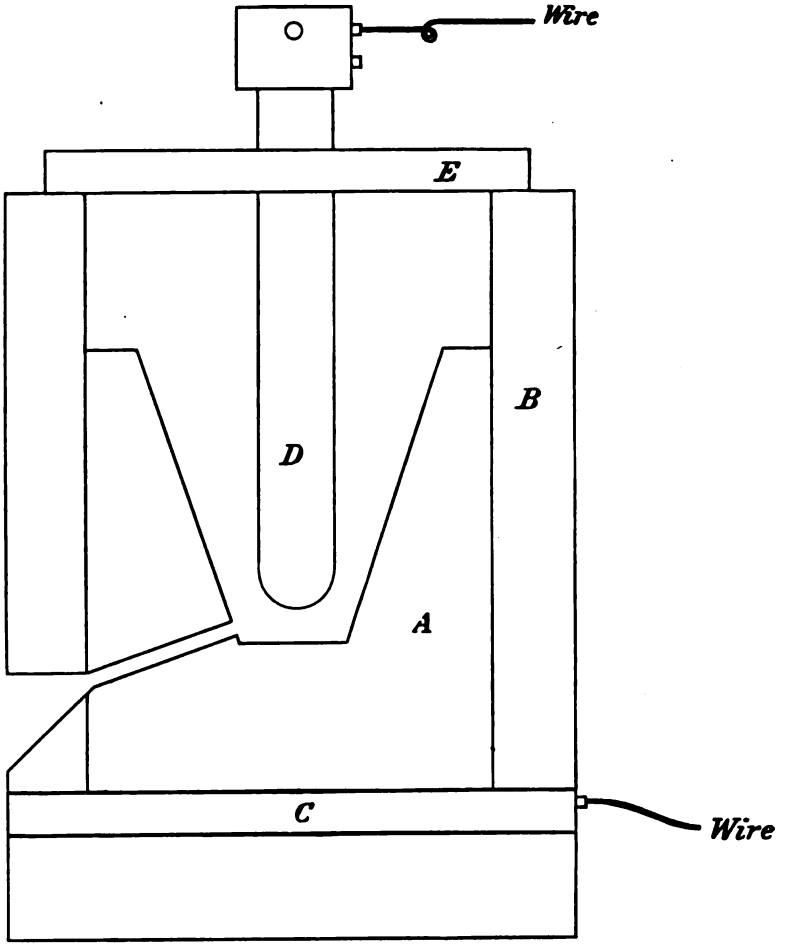
$$\text{(I)}\quad CaO+C=Ca+CO.$$
$$\text{(II)}\quad Ca+C_2=Ca+C_2.$$

Maissan did not look upon his process as being patentable, knowing that calcium carbide, its production and leading properties, were known to chemical literature.

Bullier received in February, 1894, from the German Government, under No. 77168, a patent for the process of manufacture of "calcium-baryum-strontium-carbid," after the method or process of Maissan. This, when it became known, caused considerable surprise. Later in the same year, the experiments of Willson, at Spray, North Carolina, became known.

Calcium carbide is generally produced in ovens similar to those used for aluminium, according to the Héroult system.

The accompanying drawing represents the general idea of the electrical ovens more frequently used. The crucible *A* (into which the mixture to be smelted is put) is surrounded with the wall *B;* the whole rests on the metal plate *C*, which also acts as one of the electrodes; a carbon rod or bar *D* is passed through the lid *E;* this bar *D* acts as the second electrode. It should be so constructed that it can easily be given a perpendicular or lateral movement, as the reaction takes place only in the line of the voltaic arc; the parts that do not come within the territory of the charge will remain unchanged. Then a thoroughly mixed composition of oxide of calcium (56 parts)


Wire
E
B
D
A
C
Wire

and coal dust (36 parts) is placed in the crucible, and the electrical current is applied.

Calcium carbide is a hard, bluish-black, clear, crystalline body (exceptional bodies are reddish brown, shiny) and is impervious to light. It is insoluble in all known dissolvent elements; it possesses at 18° C. the specific gravity of 2.22, and its electrical conductibility nearest resembles that of carbon. Dry carbide can be submitted to the action of a powerful gas flame without exhibiting any changes; on the other hand, when heated in an oxygen atmosphere, it readily ignites and burns with a strong development of light into calcium carbonate. Hydrogen does not affect it at either a high or low temperature.

When exposed for a short time to damp air, it exhibits disintegration, the outer surfaces become crumbly and the color lighter, and a very penetrating odor, strongly resembling that of garlic, is emitted.

When water is poured over calcium carbide, a violent generation of gas takes place. The carbide readily divides under the influence of water into acetylene and calcium hydroxide ($CaC_2+2H_2O=C_2H_2+Ca(O.H)_2$).

The Aluminium-Industrie-Actien-Gesellschaft, in Neuhausen, Switzerland, as well as the Electrochemische Werke G. m. b. H., in Bitterfeld, Germany, manufactures calcium carbide which averages in quality 79 per cent; from this percentage 3,118 kilograms (6,002.9 pounds) of calcium carbide are necessary to produce 1,000 kilograms (0.875 cubic meter*) of acetylene. It is impossible to ascertain the cost of the production of calcium carbide from either of the above-mentioned factories, but taking as a basis the lowest wholesale price of the carbide at 40 marks ($9.52) per 1,000 kilograms (2,204.6 pounds), then the cost of 1,000 kilograms (0.875 cubic meter) of acetylene will cost 1,247.20 marks ($296.93).

It may be further added that, in addition to the above use of calcium carbide, it can be used advantageously in metal refining, especially for reductive purposes in the manufacture of ingot iron.

I have obtained the following prices from the Electrochemische Werke G. m. b. H., in Bitterfeld, whose business offices are at No. 29 Luisen Strasse, Berlin: On small orders, the price is 60 marks ($4.28) per 1,000 kilograms (2,204.6 pounds); large orders, 450 marks ($107.10) per 10,000 kilograms (22,046 pounds), and if a large and steady trade were created, the price would fall to 400 marks ($95.20) per 10,000 kilograms (22,046 pounds). These prices are for the calcium carbide loaded in the ship at Hamburg, but do not, however, include packing. The steamship companies demand that the carbide be packed in iron cylinders or drums containing 200 kilograms

* 1 cubic meter=35.316 cubic feet.

(440.92 pounds). These cylinders must not only be water-tight, but also incased in a tight box or barrel. The cost of packing is 8 marks ($1.90) per 200 kilograms (440.92 pounds).

Great difficulty has been heretofore experienced in the shipment of the carbide, but it has recently become easier and probably would become more so were the demand large.

The above-mentioned factory in Bitterfeld is the only one in Germany where calcium carbide has been manufactured to any large extent. They are now constructing a larger branch in Rheinfelden, near the Swiss frontier, where there is a very great water power. This new place will be finished in the early fall. As soon as their dynamos are run by water power their prices will become somewhat lower.

ACETYLENE GAS.

The principal feature of acetylene gas is that it burns with great intensity of light. The flame emits a fine soot when burned with an ordinary burner, therefore it should be burned with one specially constructed for this gas, so as to insure complete combustion; then, the flame is blinding white in color and possesses about ten times the intensity of common illuminating gas. When the proper quantity of oxygen necessary for complete combustion is mixed with the acetylene, as shown in the equation $C_2H_2+O_5=2CO_2+H_2O$, a strong explosion takes place when the flame is ignited. The acetylene must, however, be under water pressure, thereby insuring a proper distribution in the pipes as well as a steady flame.

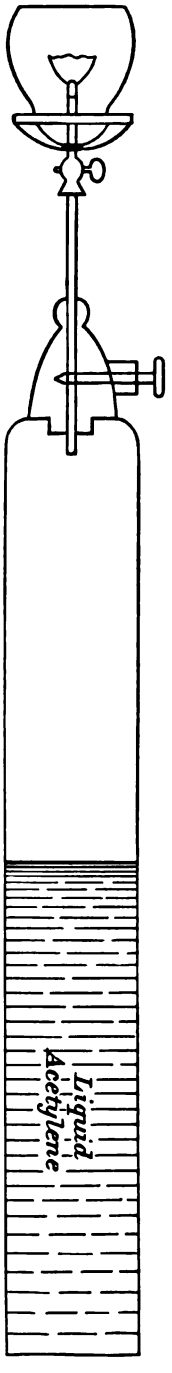
This illuminant has the very great advantage of giving a great amount of light with very little heat; in comparison with the "illuminating" gas, it generates not quite one-half the amount of carbonic anhydride and vapor.

Additional importance is to be given to the fact that acetylene in a liquid state can be used for lighting purposes. The points of liquefaction are:

Pressure.	Temperature.
Atmospheres.	*Degrees.**
1	−82
9	−33.6
11.01	−23
17.06	−10
21.53	0
25.48	+ 5
32.77	+13.5
39.76	+19.5

*Centigrade.

The critical temperature is +37° C.; the point of ebullition is about −83° C. At 19.5°, 1 kilogram (2.2046 pounds) of liquid



acetylene, under normal atmospheric pressure, gives 896 liters of gas.

Annexed is a drawing showing a burner in direct connection with a steel cylinder containing liquid acetylene.

Through this means vehicles and isolated or other buildings can be lighted with a bright and quiet flame for a long period of time, as 10 liters (10.5 quarts) of liquid acetylene are equal to 3,600 liters ($3\frac{3}{5}$ cubic meters) of gas, which represents $3,600+\frac{1000}{11}=5,700$ normal candlepower hours.

Another advantage of this gas, as shown by A. Frank (Vortrag im Verein z. Beförder des Gewerbefleisses, February, 1895) is that for the manufacture of 1,000 kilograms (2,204.6 pounds) of calcium carbide (steam power to run dynamos) 3,400 kilograms (7,495 pounds) of middle-grade coal is necessary, while, on the other hand, three times that amount of coal is required to produce the same amount of candlepower with the common illuminating gas.

Acetylene gas explodes strongest when mixed with air in the ratio of 1 volume gas to 12 volumes air. When mixed just in the proportion of 4 to 5, explosion takes place.

Naturally, the fact that acetylene is poisonous demands consideration; but this point appears to be frequently exaggerated. As shown by Frank and Weyl (Ber. d. deutsch. chem. Ges., 1895, p. 2107), mice and rabbits can remain in a 4 per cent acetylene atmosphere without exhibiting any evil effects.

It may also be remarked that this gas should be handled with considerable care in experiments, as its tendency to severe explosions has been but too sadly demonstrated on both sides of the Atlantic. To this end, caution should be exercised in the following details:

(1) Copper should not be used on any part of the pipes, cocks, burners, or apparatus, as the contact of acetylene with this metal will shortly be followed by an explosion.

(2) The gas should be under sufficient water pressure to insure proper velocity in its distribution through the pipes; if the pressure is weak, the flame is liable to sink through the burner into the pipe. The result of such an accident will be an explosion.

The police authorities of Berlin forbid experiments with this gas unless permission has previously been obtained. The authorities investigate the apparatus and convince themselves of its perfect safety before issuing the permit.

It would be almost impossible to embody in this report a description of the numerous inventions that have been made in European countries for the use of acetylene gas, and as most of these inventions have already been patented in the United States, I have therefore deemed it proper to omit such a description.

REPORT BY CONSUL-GENERAL MASON.

After a period of experiment and uncertainty, during which it has encountered the more or less active opposition of many persons interested in coal gas and electrical lighting, the system of lighting by acetylene gas produced from carbide of calcium seems to have been definitely accepted by scientists as technically feasible, and, under properly regulated conditions, safe and economically advantageous.

The result has been to greatly increase the use of carbides during the past six months, so that for the moment the demand has nearly overtaken the European supply, and it is credibly reported that a company in Belgium has recently closed a contract for a large quantity from the works at Niagara Falls, in the United States. Hitherto the main source of supply for Germany and eastern Europe has been the Aluminium-Industrie-Actien-Gesellschaft, at Neuhausen-on-Rhine, near the Falls of Schaffhausen, which was the first establishment, except one in France, to begin the manufacture of carbides on a large scale by means of electrical heat generated through water power.

This company supplies about 60,000 kilograms (132,276 pounds) of carbide annually to the Prussian State railways, where it is used to purify and enrich oil gas for the illumination of railway cars, as well as stations, shops, and other buildings. Having control of practically unlimited water power, the company at Neuhausen is steadily enlarging its capacity, and now offers for export carbide of standard quality, capable of producing from 300 to 320 liters of acetylene gas per kilogram, subject to the following prices and conditions: Lots of 1 to 1,000 kilograms, 60 centimes per kilogram=$115.80 per metric ton (2,204.6 pounds); lots of 1,000 to 5,000 kilograms, 50 centimes per kilogram=$96.50 per metric ton; lots of 5,000 kilograms or over, 45 centimes per kilogram=$86.85 per metric ton.

These prices are for the carbide alone at the works in Neuhausen.

It is packed for shipment in tin cans or drums, and these, when sold for export, are again inclosed in wooden cases, and for this the following packing charges must be added to the net rates given above. The cans are of three sizes, containing, respectively, 12, 50, or 180 kilograms, equal to 26, 110, and 396 pounds avoirdupois, and are charged to the purchaser of carbide at 15 cents, 58 cents, or $1.25 each, according to size. For the wooden cases in which the cans are packed, the charges range from 10 cents per small can to 20 cents for the large ones, so that the whole cost for hermetically sealed tin drums and wooden casings would be not far from $15.75 per ton of carbide.

These are, so far as can be ascertained, the minimum prices at which carbide can now be obtained in this country, where it is manufactured by the most economical method of smelting together lime and carbon by electrical heat generated by water power. The only other competitor in the German field is a factory at Bitterfeld, in Prussian Saxony, where about 10,000 kilograms are produced annually with electric heat generated by steam power, whereby the cost is so increased that carbides from Bitterfeld are sold at 80 marks per 100 kilograms, equal to $190.40 per metric ton.

The strong and increasing demand for the new material is naturally a potent stimulant to inventors and capitalists, and one hears frequently of newly invented processes for the production of carbides by original and cheaper methods, as well as of the construction of new plants which will employ machinery and processes similar to those already in use. Of these new enterprises, the most important appears to be a laboratory now in construction in Canton Glarus, Switzerland, where water power to the extent of 4,000 horsepower will be employed. These works are intended to be ready for operation early next spring, and are expected to furnish a large and constant supply of carbide at from $60 to $70 per metric ton.

Of the new systems or processes of manufacture, one of the most interesting and important is that invented by Mr. Emil Walther, of Saxony, and described in a report by United States Consul Sawter, at Glauchau, published in CONSULAR REPORTS No. 198 (March, 1897), pp. 420–422. By this method carbides are said to be produced by smelting together carbon and alkaline earths in a furnace heated, not by electrical current, but by darting flames of acetylene gas intensified by pressure, whereby the high temperature required to combine the carbon and calcium can be generated on a large scale and more cheaply than by electricity. As to the practical efficiency of this method, no positive information can be obtained at this distance; but it is regarded by disinterested experts as perhaps the most promising of the various new processes that have been an-

nounced, concerning all of which judgment will be suspended until their practical efficiency shall have been demonstrated.

The economics of acetylene gas for domestic lighting under the conditions now exising in Germany may be stated as follows: One kilogram (2.2046 pounds) of calcium carbide yields, according to purity, from 300 to 320 liters of acetylene gas, having, volume for volume, fifteen times the illuminating power of good ordinary coal gas. To produce 1 cubic meter (35.31 cubic feet) of acetylene gas requires 7.04 pounds of carbide, costing, in ordinary quantities, say, 40 cents. Since the illuminating power of acetylene gas is fifteenfold greater than that of coal gas, this 1 cubic meter would be equal to 15 meters (529.65 cubic feet) of ordinary gas, which, at the present price of gas in Frankfort, would cost $1.35. The saving effected would therefore be, theoretically, the difference between 40 cents and $1.35, or 95 cents. This is perhaps an extreme statement, since coal gas is supplied at some other places in Germany as low as 5 cents per cubic meter—about $1.40 per 1,000 cubic feet. Even then, the cost of acetylene, as compared with coal gas, would be as 1.6 to 3—an economy of nearly 100 per cent. From the best information that can be obtained, an acetylene-gas flame of 30 candlepower consumes 20 liters of gas and costs three-fourths of a cent per hour. This contemplates the use of carbide of standard purity and productive power, and, in this respect, the carbides of commerce vary considerably.

In a series of tests made in Switzerland and reported in the Swiss Builders' Gazette, the cost of carbide from the works at Neuhausen is given at 400 francs ($76.30) per ton, but as it yielded only 280 liters of gas per kilogram, this would make the cost of acetylene 32 cents per cubic meter, instead of 40 cents, as contemplated in the foregoing calculation, which is the rate estimated for small acetylene-gas plants, such as are used for lighting villas and detached hotels or other buildings. In France, it appears from the report of tests made by the Eastern Railway Company, the cost of carbide is reckoned at $107 per ton, but it is of standard purity and yields 300 liters of gas per kilogram.

Into the much-discussed and still hardly settled question of the safety of acetylene gas as compared with petroleum, electricity, and other illuminants for popular use, it is not the purpose of this report to enter. This phase of the subject has attracted great attention in Germany, where police regulations extend to the minutest details of everything that concerns the public safety or health.

Expert opinion in this country seems agreed upon the proposition that, with reasonable precaution to secure purity in the carbide and properly constructed apparatus, its use may be rendered quite as

safe as that of petroleum lamps, high-tension electrical conductors, steam boilers, liquid carbonic acid, and other things that are used constantly without a thought of the danger which they involve. There should be regulations, of course; but they need not be more stringent than those which govern the use of steam and electricity in cities.

From the reports presented at a recent meeting of the Chemical Industrial Association, at Berlin, it would appear that most of the danger attaching to acetylene belongs to its liquid form. Mingled with atmospheric air, pure acetylene is less poisonous than coal gas. But in the present stage of carbide manufacture, it often contains impurities which, in contact with water, develop phosphureted, sulphureted, and even arseniureted hydrogens, which are not only deleterious when inhaled, but in contact with copper produce gaseous compounds that greatly increase the danger of explosion under pressure. These can, however, be almost wholly removed by passing the acetylene gas through an acid solution of a metallic salt.

But the principal peril is encountered when, for convenience of transportation or other reason, acetylene gas is condensed into liquid form. This may be done by a pressure of 68 atmospheres at any temperature below 98.7° F., which is considerably less than the pressure and cold required to condense carbonic-acid gas. Acetylene so liquefied has a tendency to explode into carbon and hydrogen, with an intense development of heat, and under these circumstances is unmanageable by any means that have yet been devised. Liquefied acetylene will probably sometime be as safe and common a material as liquid carbonic acid, but it is not so now, and until it is better understood and mastered, calcium carbide will doubtless continue to be its safest and most convenient vehicle.

PRICE LIST FOR CALCIUM CARBIDE.

In lots of 1 to 1,000 kilograms, 60 centimes per kilogram; 1,000 to 5,000 kilograms, 50 centimes per kilogram; 5,000 kilograms and more, 45 centimes per kilogram—delivered in Neuhausen, payable in advance at the receipt of our invoice; packing extra.

The carbide is packed up either in hermetically soldered tin-plate boxes containing about 8 to 12 kilograms (less we do not sell) or in tin-plate casks containing about 50 and about 180 kilograms each.

For the boxes, we charge 75 centimes; for the small casks, 3 francs; and for the large ones, 6.50 francs per piece. The packing of the boxes into wooden cases is to be paid extra, while the casks are enveloped with wood at 1 franc each for the large ones and 50 centimes for the small.

ALUMINIUM-INDUSTRIE-ACTIEN-GESELLSCHAFT,

Neuhausen, Switzerland, May 22, 1897.

COOPERATION IN GERMAN SUGAR PRODUCTION.

On December 30, 1896, the Department sent a letter of inquiry to consular officers at Frankfort and Magdeburg, asking for the following information, which had been requested by Mr. C. F. Bentley, Grand Island, Nebr.: The organization of beet-sugar factories, the class of farmers who become shareholders, the nature of the product, whether refined or raw sugar, and the relative success of cooperative factories. Proofs of the reports have been sent to Mr. Bentley.

Consul-General Mason, of Frankfort, says:

There were in operation in Germany during the year 1876, 332 beet-sugar factories. In 1884–85, the number had risen to 408, which was the maximum, the factories in active operation having since varied from a minimum of 391 in the campaign of 1887–88 to 404 during 1893–94, and to 399 at work during the present campaign of 1896–97.

Of this number, 186 factories are organized as stock companies (Actien-Gesellschaften), 111 are owned and operated by private firms, 62 are limited stock companies (Gesellschaften mit beschränkter Haftung), and the remaining 40 are under a form of organization known as "Offene-Handelsgesellschaften"—open trade associations, which differ from private firms mainly in the fact of having usually a much greater number of partners than an ordinary business firm. An example of this latter class is the factory at Minsleben, in Prussian Saxony, which has sixty-seven members and produced last year 8,000 tons of sugar.

Of these four classes of sugar-factory organizations, by far the most important is the first named—that of the stock companies—which includes not only most of the largest establishments, but comprises nearly one-half of all the sugar factories in Germany. These, as well as the limited corporations, are organized and conducted under the very elaborate and far-reaching statute of corporations, which prescribes in minutest detail all the rights and obligations of shareholders, defines the duties and responsibilities of officers, and fixes heavy penalties for every evasion or breach of trust. A shareholder in a stock company of this class is liable to the full extent of his fortune for the debts of the concern, and in the organization of such corporations for sugar manufacture the stock shares are usually issued in two categories, adapted to the calling and circumstances of the stockholder. Under the first category, the holder of

each share of stock is bound to cultivate annually a prescribed area of land in sugar beets and deliver his product to the factory. He can only sell his shares by permission of the company to a purchaser who will assume all the obligations that it may impose with regard to the growing and delivery of beets. Stock of the second category may be held by any investor, and is issued for the purpose of securing such additional capital as may be required for building, improving, or operating the factory, and which can not be obtained from the farmers of the neighborhood who can raise beets and constitute the shareholders under the first category.

Details of the inner working and management of these companies are not easy to ascertain with entire certainty, but from the by-laws of the stock company which owns and operates a factory at Gross-Gerau, near Frankfort, certain specifications have been obtained which are typical and represent practically the organization of that class of factories in Germany. The company at Gross-Gerau was founded in 1884, with an original capital of 530,000 marks ($126,140), viz, seven hundred and seventy-five shares of 400 marks ($95.20) each and five hundred and fifty shares of equal face value under the second category, as above explained. Each holder of stock of the first class is bound to cultivate in beets each year, for each share of his stock, 3 morgens of land, and to deliver the crop so raised to the factory. The "morgen" is a measure of land which varies somewhat in different European countries, and is not strictly uniform even throughout Germany, but in this region it means one-fourth of a hectare, or 0.617 acre, so that the holder of stock of the first class, now under consideration, is bound to raise, for each share so held by him, something more than 1⅞ acres of beets, and the whole area thus held under control by, say, one hundred shares of such stock, would be 185.3 acres. The company at Gross-Gerau manufactures raw and crystallized sugar, and consumed in the campaign of 1895–96, 66,014 metric tons of beets, and in the memorable campaign of three years ago, when the German sugar manufacture reached the zenith of its prosperity, is said to have paid to its shareholders dividends amounting to 52 per cent. It has under control during the present campaign the product from 3,606 acres of beets, many of the shareholders raising much more than their prescribed quota per share, which fixes only the minimum area of cultivation for each shareholder.

The limited stock companies (Gesellschaften mit beschränkter Haftung), as organized for sugar manufacture, differ from the unlimited corporations in two important respects, viz, the stockholder is held liable to only double the face value of his shares, and, second, he may, by giving two years' notice, turn in, sell, or otherwise dispose of his stock to any person, without transferring to such pur-

chaser the obligation to raise and deliver beets. In prosperous times, this plan works very well, but when prices are low and the business critical, the option of withdrawal constitutes a serious point of weakness in such organizations, and, as has been shown, they are not only much fewer in number than the unlimited corporations, but their number is decreasing.

The reasons for this will be readily inferred. In the prosperous days of sugar production in Germany, when the factories, favored by liberal export bounties, could pay generous prices for beets, and when each factory could measure its profits by the magnitude of its product, the problem was simple. New factories were built, existing ones enlarged their capacity, every farmer or landowner who had available ground in the neighborhood of a sugar factory embarked in beet culture, and all went on swimmingly toward the overproduction which, in recent years, has broken down prices, nearly destroyed the profits of sugar manufacture, and entailed a conflict of interests between beet growers and sugar manufacturers. It is now an essential point for every sugar factory in Germany to control and be able to secure with certainty each season an adequate supply of beets, and to pay for this supply of raw material as little as possible, at all events a price not disproportionate to the selling price of sugar. But such a price does not, in many cases, satisfy the beet growers, whose expenses are increased by the necessity of increased fertilizing as their land becomes exhausted by repetitions of the same crop, and who suspect the factory managers of wishing to absorb all the profits and leave the landowners a bare subsistence. It is evident, therefore, that, under existing conditions, the strongest and safest form of organization is the one which embodies most fully the cooperative principle, in which the stock shares of sugar factories are held to the largest degree by agriculturists, who are not only stimulated by their own interests to maintain their beet culture at the highest point of efficiency, both as to weight of beets produced per acre and percentage of sugar contained, but who gather the entire profit that may inhere from both processes—the growing of beets and the manufacture of sugar. In other words, the cooperative principle puts the agriculturist into the advantageous position of a man who, as farmer, is guarantied a definite price for the production of the raw material which he consumes as a manufacturer. His interests as an owner and cultivator of the soil are brought into harmony with, and support of, his interests as a capitalist. To quote the language of Dr. Follenius, a sugar-factory manager of large experience:

> The future of factories wherein the interests of capitalist stockholders are opposed to those of the beet growers is rendered by present conditions very precarious. A sugar factory must belong to the farmers who raise the beets, and who

secure to their factory, in unfavorable times, the necessary supply of raw material. Likewise, must all the profits which are gained by both beet culture and sugar manufacture belong to the agriculturist.

From the standpoint of the foregoing statement of facts, the specific inquiries submitted by the Department may be answered as follows:

(1) The cooperative principle is of large and increasing application and influence in German beet culture and sugar manufacture.

(2) The purpose and effect of its application is to bring the whole process of sugar production under control of the landowning and farming classes, exclude nonlandholding capitalists, and secure to each factory, in depressed as well as prosperous times, an adequate supply of beets as raw material.

(3) Both large landholders and small farmers are engaged in cooperative sugar production, the proportion of large landowners being greater in northern than in southern Germany, where some factories organized as stock companies have as many as 1,000 or 1,500 beet-growing stockholders.

(4) Both large and small factories are organized on the cooperative plan, but the relative proportion of small factories is decreasing, by reason of their enlargement to meet the more difficult requirements of sharp and close competition.

(5) Most factories in Germany produce only raw sugar, and they are generally not tributary to any special refinery. There are now in operation in Germany fifty-eight sugar refineries, of which fourteen are organized as full stock companies, two as corporations with limited liabilities, and the remainder are private firms. Factories which produce only raw sugar market their product somewhat in accordance with location and transportation facilities, either by direct export or by sale to the nearest refinery that will pay a satisfactory price for it.

(6) The factories organized and operated on the cooperative principle, as above described, are the most successful sugar factories in Germany, for the reason stated—that one set of stockholders reap all the profits incident to both beet growing and sugar manufacture.

(7) The number of sugar factories in Germany is not increasing, but the capacity of many existing factories is being enlarged and the cooperative principle extended in application, so as to bring the whole industry more and more under control of the agricultural, as distinguished from the capitalist, classes.

(8) "To what particular circumstances are cooperative sugar factories best adapted?" Primarily, in a country or district where beet culture and sugar manufacture do not already exist, the cooperative principle enables a number of farmers who wish to engage in beet

growing to secure what is essential to their experiment—the erection of a factory which will buy and work up their beet product. Second, cooperation is especially advantageous whenever, as at present, the selling price of sugar is so low as to oblige an independent factory to pay small prices for beets and work generally with extreme economy and on close margins. Under the cooperative system, the whole industry is concentrated in the hands of agriculturists, who are thus rendered independent of mere capitalists, who would contribute nothing but money and might demand a larger income from their investment than the business would legitimately yield. Finally, cooperation secures permanence and certainty, so far as that is possible, to the whole sugar-producing industry, by assuring to the sugar factory an adequate supply of beets for profitable operation, and, on the other hand, gives to the farmer a definite market for his beet crop, at a price in the fixing of which he, as a stockholder, has a voice and vote.

Consul Muth, of Magdeburg, says:

Formerly, only the large farm owners built raw-sugar factories, raised beets, bought from neighbors, and manufactured sugar. Such factories are still in existence. Sugar prices were high then, and considerable money was made. The smaller farmers, seeing how the few factory owners prospered, and desirous of obtaining a share of the profits, combined and established factories. The introduction of diffusion, in connection with other improvements, enabled the factories to largely increase their production—with the same room, fewer hands, and simpler machinery—and marked the beginning of a new era for the beet-sugar industry. Sugar factories were now started wherever the soil was considered suitable. All these factories were stock companies (Actien Gesellschaften), established under the stock law (Actien Gesetz) in the following manner: A number of farmers, generally not less than one hundred, but often more, formed a stock company, each one taking as many shares as his means and the extent of his farm would allow. In taking a share, the holder bound himself to plant a given territory with beets and to furnish a certain quantity to the factory. When the income-tax law was passed in 1891, it provided that not only the income of the stock companies should be taxed, but also the income of the shareholders derived from their investments in stock companies, thus putting a double tax on the members of these sugar factories. To counteract the stipulations of this law, particularly onerous to cooperative stock companies founded on agricultural enterprises, another law was passed (April 20, 1892), creating the so-called "corporations with limited liability" (Gesellschaften mit beschränkter Haftung), which are

in the nature of copartnerships. They pay no income tax; can bind the members to perform other obligations, for instance, furnishing beets, removing chips or dirt, etc.; they are not obliged to publish their balance sheet; and members interests (shares are not issued) can only be transferred through a notarial act. Many sugar factories have availed themselves of the privileges of this law and reorganized into corporations with limited liability. It is safe to say that most factories will gradually follow this course, unless there are special reasons why they should not do so. Fear to lose their stockholders, if the old stock company is dissolved, especially when this company is no longer successful, is one of the reasons for hesitation. All new factories will probably be organized under this law, and a corporation with limited liability is now considered the most desirable form under which to establish sugar factories. There are in Germany about half a dozen stock companies in this line without the cooperative feature. They were started and are managed by banking institutions, and are also prosperous.

I give below a description of the general plan upon which such a corporation factory is founded, and have selected, for an example, a very successful factory of this neighborhood.

Capital, 810,000 marks ($192,780), contributed by one hundred members in various amounts (called Stammeinlagen), ranging from 1,500 marks ($357) upwards. Each contribution of 1,500 marks ($357) carries the obligation to plant 1¼ hectares (3.09 acres) with beets and deliver 600 cwts.* of beets to the factory. Members bear the expenses of delivery, unless their farms are situated at a distance of 9½ kilometers (5.9 miles) or more, in which case an allowance for freight not exceeding 10 pfennigs (2.38 cents) per cwt. of clean beets is made, according to such distance. Members must first offer their entire production—beyond the obligatory 600 cwts. for each 1,500 marks ($357) contribution—to the factory, and can not sell their surplus to others, unless their own factory offers a smaller price. Violators are fined 1.50 marks (35.7 cents) for every cwt. of beets.

The factory has the right to buy from outsiders also. If members are unable to fulfill their obligations as to the planting of beets, they must advise the factory at once. They may then furnish a substitute, but are liable for any shortcomings. The factory may buy any shortage of beets at the member's expense, and charge a commission of 10 pfennigs (2.38 cents) per cwt. besides. If timely notice is not given, the member must pay a fine of 1.50 marks (35.7 cents) for every cwt. of beets short of his obligation. If a member fails to follow the instructions given for the planting of beets, the factory need not accept such beets, and may charge a fine of 1.50

*Cwts. of 110.26 pounds each.

marks (35.7 cents) for each cwt. of the amount said member was bound to deliver. If crops are damaged or destroyed by hail, flood, insects, or similar accidents, the member must at once notify the factory, and may then be partly or entirely relieved from his obligation to deliver.

The capital paid in can not be withdrawn by the member, but his interest in the corporation may, with the approval of the board of supervision, be transferred to other parties through a notarial act.

Members are not liable beyond the amount paid in and are not required to make any additional payments for any business purposes whatsoever. The law will allow, however, that assessments be levied, provided this is incorporated in the statutes.

Beets are paid for according to the sugar contents, fixed by polariscopic tests. Payments for the delivered beets and of profits on the purchased beets are made to the members in three installments—November 10, January 15, and July 1, which dates may be altered by the board.

The factory returns all beet chips (after the sugar is extracted) and all soil washed off the beets, and the member or seller of beets is obliged to promptly remove them at his expense. (This factory, as is seen, returns all chips; others return only a certain percentage and sell the rest.)

The affairs of the corporation are managed by a board of nine directors (Vorstand) elected for a term of three years, three members (who may be reelected) retiring every year. The principal functions of this board are to make alterations in, or additions to, the factory, to close contracts for beets, supervise the culture of the beets, select the proper seed and fertilizer, fix the price of beets and the percentages to be deducted for soil attaching to them and for beets improperly topped, limit fines, and enter into contracts for amounts not exceeding 5,000 marks ($1,190).

A board of supervisors (Aufsichtsrath) is also elected, consisting of five members, two of whom (who may be reelected) retire every year. Its main functions are to supervise the transfer of members' interests, to examine the books, audit the accounts and annual balance sheet, to pass upon contracts in amounts from 5,000 to 10,000 marks ($1,190 to $2,380), and to decide appeals which may be taken from the decisions of the board of directors.

In the general meeting of the members every 1,500 marks' ($357) contribution entitles the member to one vote, the majority of votes deciding. A general meeting must be called at the end of each fiscal year to hear the annual report, but may also be called at any other time, if occasion requires. At least 5 per cent of the book value of the buildings and 10 per cent of the machinery shall be

amortized every year. The net profit, after deducting amounts to be added to the reserve fund and contingency for the directors, if any, is distributed as follows: Five per cent interest on the already existing reserve fund and 20 pfennigs (4.76 cents) per cwt. of the obligatory 600 or more cwts. are first paid to members. The balance of the profit is distributed among the members according to the number of cwts. furnished by them. (Beets paid for at certain contract prices do not participate in the profit; the obligatory 600 or more cwts. and most of the beets furnished by members in addition are delivered at no fixed price, and among these cwts. the profit is divided; this profit represents the price realized by the members for their beets.)

The reserve fund is created in the following manner: If the profit of the factory enables it to pay more than 75 pfennigs (17.85 cents) per cwt. of beets to its members, the latter receive 75 pfennigs on the obligatory 600 or more cwts. and 90 per cent of the profit in excess of 75 pfennigs, while the remaining 10 per cent is put in reserve until this reserve fund reaches 20 per cent of the entire capital. Should the profit fall below 75 pfennigs per cwt. on the obligatory 600 or more cwts., the difference may be paid out of this reserve fund.

Services by members in the interest of the corporation are rendered gratuitously.

Differences between members and the corporation shall be settled by arbitration.

The factory furnishes to its members and regular customers from whom it buys beets 64 pounds (70.55 pounds) of seed per hectare (2.471 acres) free of charge.

Farmers who desire to become members of such corporations must, of course, have some means—not only land to raise the necessary quantity of beets, but also cash to pay for their contribution. We find in these corporations wealthy farmers with large interests, but the majority are small farmers who have contributed not more than the minimum amount required by the statutes.

Most of these factories produce raw sugar only, but a few are making granulated sugar also under the Drost and Baumann patents. It is expected that when these patents expire (in about four years) the production of granulated sugar in the raw-sugar factories will increase. The principal reasons why sugar factories consider it more advantageous to confine themselves to raw sugar are these: Raw sugar can be sold at any time and in any quantity, while refined sugar is always handled in smaller quantities; factories making refined sugar must always produce a certain uniform brand, which will require greater care in the manufacture and a more complicated technical, as well as commercial, management. As the sugar contents of the

beets are continually affected by climatic changes, the sugar factory must strive to extract the sugar as quickly as possible and dispose of its products rapidly. The main object of the factory is to obtain, besides a good price for its products, the bounty from the Government, and it generally manufactures no better sugar than is necessary to obtain this bounty—1.25 marks (29.75 cents) per cwt. (110.23 pounds) on sugar of at least 90 per cent purity.

Probably all factories have their agents in Magdeburg, who sell sugar on a commission—generally 10 pfennigs (2.38 cents) per cwt. The factories are not tributary to a central refinery, although it is by no means impossible that they will combine and also build their own refineries on the above-described plan, as they are now about to build molasses refineries. Formerly, molasses found a ready market in Germany and France for the manufacture of alcohol. Since France put a prohibitory tariff on molasses and Germany restricted the production of alcohol manufactured from molasses, the latter became a drug in the market, and is now being sold to molasses refineries which make a cheap grade of sugar, so-called ground melis.

All sugar factories, large or small, formerly made money, but competition here and in other countries has reduced profits. The principle, now, is to build on a big scale to reduce expenses. The large, newly established factories with the latest improvements are still able to work profitably, even at the prevailing low sugar prices, but the smaller concerns, especially in localities where land and labor are high, are under great difficulties. I believe they will gradually be forced to consolidate or connect themselves with some larger factory within their reach. The work of centralization is slowly going on in this industry, as in others.

Seeing what cooperation has done for the German beet growers, I am naturally partial to their system, and, in fact, consider it the only one under which the farmers obtain the full benefit of their labor. But, as before mentioned, the time for starting on a small scale is past, and it will require much capital (in my estimation, from $250,000 upwards) to start a factory in the United States able to profitably produce and compete. Farmers with the necessary means and suitable soil should not hesitate to adopt this cooperation feature, and it should also be the aim of farmers not so fortunately situated. It is, of course, necessary in enterprises with many partners that the individual member should subject his will to that of the managing board, and no farmer should join unless he is willing to do so. Cooperative enterprises are sure to fail unless the members are duly imbued with the full sense of allegiance to the common interest and a fixed determination to further the same, even at the sacrifice of their own individuality.

BUILDING REGULATIONS IN GERMANY.

Apropos of the much-discussed and widely agitated subject of tenements and high buildings in the United States, especially in the city of New York, where many of the new office buildings are 300 feet or more in height and built on the steel-skeleton plan, veneered with masonry, and in view of the assertion that the exclusion of light and air from the narrow streets must affect the health of the city, a few of the recently adopted laws governing the building of tenements and dwelling houses for those of moderate means in Germany may be of opportune interest to Americans.

The Government of Saxony is making every endeavor to better the condition of tenements and moderate-priced dwellings in Saxony, from a sanitary point of view as well as in a social-political respect. These efforts are due to the increase of population in many of the cities and their neighboring communities. In a recent decree, the boards of public works, or "Baupolizeibehörden," have been instructed to prevent as much as possible the building of ordinary tenement houses, and also to take all possible measures to provide the man of small means with good, healthy, and comfortable lodgings. The Ministry of the Interior has therefore thought it appropriate, after hearing the arguments of the board of health, to form a set of resolutions, the most important of which will be of general interest. The Saxon Government directs that in the laying out of new streets and sites for dwelling houses, builders must choose a position where direct exposure to sunlight may be had, not only in front, but at the rear of the site as well; therefore, closed streets (streets with houses built in rows) shall be laid out from northeast to southwest or from northwest to southeast. Of course, in laying out building plans for the arrangement of street lines, the special local conditions and hygienic demands are always first considered. Another important feature in the plans for building, especially in the erection of large dwellings, is the provision of squares in a sufficient number and size, as well as front gardens, with the culture of trees. Above all things, the boards of public works shall prevent, under all possible circumstances, the erection of new tenement houses, although they can not in all cases be entirely excluded. For this purpose, the authorities have arranged certain measures for the width and depth of a dwelling house of about 15 by 13 meters (about 49 by 42 feet), which, as a rule, must not be exceeded. The regulation governing the supervision of sleeping apartments in all kinds of dwelling

houses, small hotels, and lodging houses, in order to guard against and prevent overcrowding and to promote sanitary conditions, is also important. It is required by law that a family lodging shall comprise at least a sitting room that can be well heated, a bedroom, and, when practicable, a kitchen, as well as the necessary space for cooking utensils, wood, etc. Sitting and bed rooms combined must have at the smallest calculation 30 square meters (323 square feet) of ground space, and must be provided with movable windows. The total surface of the bedroom windows shall in every case and at the lowest estimate amount to one-twelfth of the ground-surface space of the room. All windows must open into immediate air, and at least one shall open into the street or a sufficiently large yard or garden. It is most desirable that every lodging, when the arrangement of rooms so warrant, should have two windows facing each other, so as to render a thorough airing of the apartments practicable. An apartment house is to be condemned as overcrowded and unhealthy when it does not afford at least 20 cubic meters (706 cubic feet) of breathing space for every adult, and at least 10 cubic meters for every child. The given capacities are the lowest estimates of space demanded by the new laws governing the building of dwelling houses. These rules are enforced by constant inspection by agents of the imperial board, and the law is carried out to the letter for the protection and comfort of the German people.

The problem as to "sky scrapers" is not a new one, for in ancient Rome it was necessary to curb the zeal of landowners and builders by decrees limiting the height of buildings on the principal streets. As the architects of those days dealt only with solid masonry, their structures were certainly lofty enough. How one of those old Romans would open his eyes if told that nineteenth century America could bargain with a great ironmaster for the skeleton of a twenty-four story edifice at so much per ton, delivered and put together on his site in any big city, the various parts being brought together and fitted like a child's puzzle, so that the towering structure is reared with the speed of magic—in a night, as it were. Germany will have none of this new architecture, preferring the old, more substantial, and solid styles. The Germans, with a desire to obtain the full worth of every pfennig expended, argue that the iron or steel in contact with mortar will inevitably become honeycombed with rust, and ultimately will be unable to sustain the weight of brick and stone placed upon it. Considering, also, the danger to life and limb, the elevator accidents, etc., the conservative German is not enthusiastic regarding "sky scrapers."

GEO. SAWTER,
Consul.

GLAUCHAU, *July 20, 1897.*

GERMANY'S EXPORTS TO MEXICO IN 1896.

Germany imported from Mexico in 1892 goods worth 14,700,000 marks ($3,498,600); in 1895, goods worth 11,600,000 marks ($2,760,800). This shows a decrease. She sent thither in 1892 goods worth 12,000,000 marks ($2,856,000); in 1893, 11,600,000 marks ($2,760,800); in 1894, 10,900,000 marks ($2,594,200); in 1895, 16,300,000 marks ($3,879,400). For 1896, as far as figures can be had, the increase has continued, especially in textiles, ironware, china, glassware, and machinery. A decrease is reported in drugs, guns and ammunition, leather goods, pictures, and silks.

The following table reviews the exports of important articles sent thither during 1895 and 1896, expressed in double hundreds (220.46 pounds):

Articles.	1895.	1896.
	D. kun.	*D. kun.*
Cottons	1,767	2,359
Explosives	1,485	1,554
Ironware:		
Coarse	15,541	12,356
Fine	2,792	3,022
Common hollow blown glass	25,792	36,275
Cast-iron machines	5,067	5,867
Faience articles	3 077	3,459
Hosiery	256	297

The increase in these articles will amount to 1,000,000 marks ($238,000).

The following table shows the decrease in 1896, as compared with 1895, of the following articles:

Articles.	Quantity.	Articles.	Quantity.
	D. kun.		*D. kun.*
Cotton passementerie	95	Glove leather	17
Hosiery	238	Fine leather wares	20
Aniline colors	153	Pictures	37
Skins and hides of fur animals	481	Half silks	46
Pianos	12	Woolen cloth and clothes	126
Artillery fuses	1,157	Woolen and silk passementerie	56

The export in guns for war purposes dropped from 397 double hundreds in 1895 to none in 1896. The latest reports from Mexico show a great demand for all kinds of machinery, light rails, etc. All kinds of enterprises, it is said, are being started. Factories are being enlarged, new mines are being opened and old ones improved,

railroads, breweries, sugar refineries, etc., are being built all over the Republic. The customs authorities are said to be very strict in the matter of invoices. German writers urge exporters to take every care in packing and shipping goods. The United States might make it almost impossible for Germany to sell to Mexico. The country needs new machines for mining, railroading, agricultural, and other purposes. Surely Germany can supply no better than can be bought in Galveston, Richmond, Baltimore, Philadelphia, New York, or Boston.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *August 14, 1897.*

ECONOMIC SITUATION OF MEXICO IN 1895.

I send copy* of the Third Annual Statistician (Anuario Estadistico) of the Republic of Mexico, published by the Department of Fomento (Public Works) under the direction of Dr. Antonio Penafiel, containing statistics for the year 1895. Though the data is incomplete in several branches, this publication is superior to those of previous years. Values are estimated in Mexican silver.†

It shows the population of the Republic (12,578,861), places located geographically, movement of population (incomplete), mortality from typhus and smallpox, mortality in the municipality of Mexico, trade-marks registered, patents issued, domestic products brought into the capital, statistics of the slaughterhouse in the city of Mexico, shipping, and crime in the Federal District.

The value of exports was $90,854,953 ($45,427,276‡ in United States currency), an increase of $11,511,766 ($5,755,883) over 1894. The imports, from statistics of the Treasury Department, were $34,002,749 (gold), an increase of $3,715,266 over 1894.

The revenue of the Republic was $46,907,123.16 ($23,453,561); expenditures, $45,078,551.95 ($22,539,275). The budget amounted to $45,610,279.92 ($22,305,139), an increase of $975,486.59 ($487,743) as compared with 1894. The revenue of the States was $17.131,-929.78 ($8,565,964); expenditures, $16,211,710.23 ($8,150,855). Income of municipalities, $11,299,250.18 ($5,649,625); expenditures, $10,996,660.27 ($5,498,330).

The value of metals received at the mints was $41,608,470.10 ($20,804,235), an increase of $4,502,062.10 ($2,251,031) over 1894. The

* Filed in the Bureau of Foreign Commerce, Department of State.

† The imports into Mexico are valued on a gold basis, all other valuations being on a silver basis.—*Note by the Bureau of Foreign Commerce.*

‡ Taking the average value of the Mexican dollar in 1895.

coinage amounted to $28,207,175.40 ($14,103,587), a decrease of $2,532,414.40 ($1,266,207.20) as compared with 1894.

The number of kilometers of railroad constructed was 201.3 (125.081 miles); of telegraph, 1,764 (1,096.096 miles); of telephone, 1,028.34 (638.354 miles).

The decrease in the number of post-offices was 20, as compared with 1894.

The number of titles to mines issued was 1,347, an increase of 149 over 1894. Three hundred and ninety-eight titles were issued to 423,618 hectares (1,046,760 acres) of public lands valued at $118,409.56 ($59,204).

There are 24 museums, 68 libraries with 512,529 volumes, and 39 scientific societies in the Republic. Of the 454 periodical publications, 439 are printed in Spanish, 12 in English, 2 in French, and 1 in German, there being among them 44 dailies and 185 weeklies.

Without data from the States of Veracruz and Mexico, there are 9,737 schools in the Republic, 4,105 supported by the State governments, 3,394 by the municipalities, and 2,238 by private funds. Of these, 4,843 are for boys, 2,672 for girls, 2,209 for both sexes, 2 normal schools, 1 preparatory school, and 10 professional schools. The average attendance was 406,945. There was expended for these schools $4,719,066.87 ($2,359,533), exclusive of those supported by private funds. Using the figures of 1894 for Veracruz and Mexico, there was an increase of 822 schools for 1895.

The principal agricultural products, quantity produced, and values were:

Products.	Quantity.	Value.	
		Mexican currency.	United States currency.
Cereals.			
Rice.....kilograms...	12,326,190.96	$1,400,299.40	$700,149
Barley.....hectoliters...	1,674,798	3,587,682.65	1,798,341
Corn.....do.....	25,339,417.89	75,695,383.21	37,847,691
Wheat.....do.....	3,536,327.09	13,273,790.50	6,636,895
Leguminous.			
Pease.....do.....	88,539.18	366.771.40	183,385
Beans.....do.....	1,522,408.25	7,269,123.25	3,634,561
Chick-pease.....do.....	272,898.94	932,608.60	466,304
Garden vetch.....do.....	197,765.38	624,530.22	312,265
Lentils.....do.....	12,025.77	64,441.25	32,220
Tuberous.			
Sweet potatoes.....do.....	723,120.47	859,461.50	429,730
Huacamote.....do.....	83,150.96	108,348.82	54,174
Potatoes.....kilograms...	13,368,817.224	879,430.15	489,715
Chile.			
Dried.....do.....	4,410,978.854	1,731,857.67	865,928
Green.....hectoliters...	354,907.14	758,199.90	379,099

Principal agricultural products, quantity produced, and values—Continued.

Products.	Quantity.	Value.	
		Mexican currency.	United States currency.
Sugar-cane products.			
Sugar cane.....kilograms...	2,687,386,479.432	$25,692,281.25	$12,846,140
Sugar.....do.....	143,577,628.152	10,283,994.38	5,141,992
Brown sugar.....do.....	69,083,236.846	7,942,787.63	3,971,393
Sirups.....do.....	57,824,908.11	3,304,787.82	1,652,393
Oleaginous.			
Benne seed.....hectoliters...	77,346.08	144,773.00	72,386
Peanuts.....do.....	126,015.68	325,413.00	162,706
Cocoanut oil.....do.....	24,453.71	130,955.00	65,472
Cocoanuts (milk).....number...	310,953,000	3,522,789.00	1,761,394
Linseed.....hectoliters...	106,934.01	373,115.00	186,557
Castor beans.....do.....	20,955.07	83,434.00	41,762
Rape seed.....do.....	7,297.9	34,806.00	17,403
Lime-leaf sage (chia).....do.....	3,513.22	20,168.00	10,084
Alcohol and fermented beverages.			
Alcohol from cane.....do.....	483,352.27	5,056,474.82	2,528,237
Alcohol from pulque.....do.....	10,253.84	199,935.00	99,967
Mescal.....do.....	227,565.67	3,078,372.00	1,589,686
Pulque.....do.....	2,067,790.89	3,562,435.05	1,781,267
Sweet pulque (tlachique).....do.....	908,274.66	1,294,575.00	647,287
Textiles.			
Sisal hemp.....kilograms...	42,378,544.881	4,104,096.00	2,052,048
Aloe fiber.....do.....	4,358,172.317	325,250.95	162,675
Cotton.....do.....	35,612,531.145	10,176,050.50	5,088,025
Grape products.			
Grapes.....do.....	1,412,736.573	161,372.25	80,681
Wine.....hectoliters...	6,163.31	146,028.70	73,014
Alcohol.....do.....	3,469.61	83,724.80	41,862
Dye products.			
Indigo.....kilograms...	135,970.951	285,530.00	142,765
Brazil wood.....do.....	2,867,344.94	64,795.00	32,397
Logwood.....do.....	77,839,102.973	2,110,038.50	1,055,049
Mulberry.....do.....	8,993,129.537	195,300.00	97,650
Tanning products.			
Cascalote.....do.....	2,176,809.834	242,070.00	121,035
Tanning bark.....do.....	14,985,399.637	457,167.26	228,583
Economic plants.			
Cacao.....do.....	2,425,255.452	1,123,180.00	561,590
Coffee.....do.....	19,059,700.518	11,565,519.28	5,782,754
Tobacco.....do.....	56,632,766.799	6,464,733.50	3,232,366
Pepper.....do.....	54,102.152	14,055.00	7,027
Vanilla beans.....number...	10,714,000	667,145.50	333,572
Gums and resins.			
Chewing gum (chicle).....kilograms...	1,812,859.622	549,865.50	274,982
Caoutchouc.....do.....	614,556.599	410,290.00	205,145
Mezquite gum.....do.....	63,456.851	7,292.00	3,646
Copal gum.....do.....	9,745.343	10,313.55	5,156
Medicinal plants.			
Jalapa physic (purga de jalapa).....do.....	22,724.757	6,945.00	3,472
Sarsaparilla.....do.....	686,896.446	100,730.00	50,365

POWELL CLAYTON,
Minister.

MEXICO, *July 29, 1897.*

TRADE BETWEEN THE UNITED STATES AND MEXICO.

United States manufacturers and exporters in general should unite and establish an agency at Guaymas. The expenses of such an agency would not be great if ten or twelve manufacturers of different lines should unite.

Many firms send representatives to Mexico who are new to the field, and when, at the end of a few weeks' trip, they fail to procure orders to the amount that was expected, they become disgusted and return home, and thus leave the markets open to our more painstaking European competitors, who, by their staying qualities, invariably obtain large orders.

Sonora and Sinaloa offer a field of importance to United States shippers; but they should make up their minds that it will require an outlay of capital and time before the trade can be diverted from the old European channels. Business is done more slowly in Mexico than in the United States, and American exporters who want to secure Mexican trade must conform to conditions and customs in vogue there. They should make goods to suit the wants of our neighbors, and as cheap as anybody will make them. If they are not willing to do these things, they had better keep their traveling salesmen at home and not waste time and money.

The commercial traveler should take great pains to ascertain how the goods are to be packed, and inform his house. The instructions for packing and baling should be closely followed, as deviation will often considerably increase cost of the merchandise in the shape of duties.

The superiority and excellence of United States manufactures have been recognized, and whenever the goods have been properly represented, the tendency has been to purchase them. Especially is this the case with shelf hardware, boots and shoes, fur and wool hats, bleached and unbleached cotton, brown and blue denims, bags, lard, candles, tallow, bacon, groceries, bottled beer, bourbon whisky, lumber, mining machinery, and explosives. Yet, with Mexico at our door, with complete railroad facilities, with freight rates based upon water rates from St. Louis, Kansas City, and Chicago to Guaymas, we have only a little over 50 per cent of Mexico's foreign trade in Sonora and Sinaloa. The fault lies with the manufacturers that our exports to Mexico are not now 75 or 80 per cent, and not with the United States consular service.

During my present term of office, I have had opportunities to come in contact with nearly all the salesmen visiting Nogales. I have

urged them to visit Magdalena, Hermosillo, and Guaymas, and, with a few exceptions, they have secured good orders. Without this personal encouragement, many of these men would never have taken their samples into Mexico. But until agencies are established throughout the Republic and commercial travelers employed who are familiar with the Spanish language, much of the trade naturally belonging to the United States will continue to go to Europe.

REUBEN D. GEORGE,
Vice-Consul.

NOGALES, *July 10, 1897.*

WAGES AT BRUSSELS.

The city of Brussels is composed of Brussels proper and nine suburbs, viz, Anderlecht, Etterbeek, Ixelles, Koekelberg, Laeken, Molenbeek St. Jean, St. Gilles, St. Josse-Ten-Noode, and Schaerbeek, each being an independent municipal government. The municipal authorities of Schaerbeek recently fixed as follows the minimum wages to be paid workmen by contractors working for the commune:

Description.	Wages per hour.	
	Centimes.	
Street laborers	40	$0.077
Masons	40	.077
Journeymen masons	30	.057
Journeymen masons under 16 years of age	30	.057
Carpenters	45	.086
Carpenters' assistants	30	.057
Plumbers	45	.086
Plumbers' assistants	30	.057
Plasterers	40	.077
Plasterers' assistants	30	.057
Joiners	45	.086
Joiners' assistants	30	.057
Locksmiths	40	.077
Under locksmiths	30	.057
Glaziers	40	.077
Glaziers' assistants	30	.057
Painters	40	.077
Under painters	30	.057
Stonecutters	40	.077
Marble workers	40	.077
Upholsterers	40	.077
Slaters	40	.077
Slaters' assistants	30	.057

The municipal council reserves the right to take such measures as it deems proper to insure the payment of these wages. Contractors are prohibited from evading the payment of the mininum wages by

any subterfuge or excuse whatever, especially in agreeing with workmen. The contractors shall be subjected to a fine of 5 francs (96.5 cents) per day and per workman for each violation of the regulations. This fine, stipulated in favor of the commune, is independent of any claim the workman may bring against his employer.

GEO. W. ROOSEVELT,
BRUSSELS, *August 16, 1897.* *Consul.*

STRIKES IN BELGIUM.

The Office du Travail reports during the month of May twelve strikes, comprising 2,350 strikers, affecting twenty-eight branches of trade, principally manufacturing industries. About one-half the number of strikers consisted of the working force in two important iron industries, one at Antwerp and the other at Brain-le-Comte. Two small disturbances in textile factories were reported from Ghent.

The motives for the various strikes were desire for increase of wages, to abolish retention of part of wages (known as guaranty), to obtain suppression of fines, weekly integral payment of wages, guarantee of a minimum wage, to be furnished with first-class raw material, demand for eight hours to constitute a day's labor, opposition to changes in existing methods of labor, and manifestation of solidarity. Out of the eight strikes reported as ended, only one (which lasted two days and concerned 400 strikers) obtained full concession. Two, affecting 800 workmen, were partially successful, and five failed absolutely, involving in two cases discharge of strikers.

Sixteen strikes, including miners' strikes, were reported in June. The unusual number of strikes is attributed to general disturbances in the coal districts, which have been very detrimental to commerce in general in Belgium during the months of June and July, when more than 19,000 miners were idle. The coal miners' strike lasted nearly six weeks, causing great distress among the miners. The aid expected from the Socialist League could not be granted on account of insufficient funds. The miners have now resumed work without having received any concessions from the mine owners.

The tabulated statement following shows the number of strikers and industries, the motives and results.

Strikes in April, May, and June, 1897.

Dates.		Trades of strikers.	Number of establishments.	Number of strikers.	Motives.	Results.
Commencement.	Ending.					
April 25, 1897	.....	Quarrymen.....	8	40	Desired increase of wages.	
May 2, 1897	.....	.....do.....	8	190	Sympathy with above strike.	
May 21, 1897	.....	Cigar makers.....	1	110	To obtain better raw material and payment of integral weekly wages.	
May 24, 1897	June 14, 1897	Mechanics.....	1	650	To obtain guaranty of minimum wages and discharge of foreman.	Failed; 10 strikers discharged.
May 31, 1897	June 3, 1897	Cabinetmakers	4	150	To obtain suppression of a new rule of workshop.....	Successful.
June 4, 1897	.....	Cigar makers.....	1	19	Desired increase of wages.	
June 5, 1897	June 11, 1897	Mechanics.....	1	125	To obtain abolition of retention of part of wages, known as "guaranty."	Successful.
June 9, 1897	.....	Hatters.....	1	*28	To have discharged workmen reinstated.	
June 15, 1897	.....	Navvies	1	26	The discharge of foreman.	
June 21, 1897	June 25, 1897	Machine stitchers.....	1	18	To prevent the substitution of work by the piece for work by the day.	Failed; 35 strikers discharged.
June 22, 1897	.....	Cabinetmakers	1	5	Desired increase of wages.	
Do.....	.....	Cigar and cigarette makers.	1	50	" Do.	
June 25, 1897	.....	Piano makers.....	1	8	To have wages increased and a discharged workman reinstated.	
Do.....	June 30, 1897	Cabinet and chair makers...	1	203	Desired reinstatement of two discharged workmen.....	Failed; 5 strikers discharged.
From June 25 to 30, 1897.	.....	Coal miners.....	24	†19,000	Desired modification of workshop rules.	
From June 30, 1897.	.....	Cigar makers.....	1	20	Desired increase of wages.	

* At a subsequent date, 16, and, still later, 126 strikers were involved. † About.

BRUSSELS, *August 10, 1897.*

GEO. W. ROOSEVELT,
Consul.

THE NEW TARIFF AND EUROPE.

Efforts are being made to unite Europe in a tariff war with the United States. They indicate a desire on the part of European powers to counteract the rapidly increasing, successful competition of the United States. The opposition is not so much to the tariff as to the competitor whose wares and products were weakening influences hundreds of years old. Count Ledebur, the Austrian Minister of Agriculture, has expressed himself repeatedly in favor of concentrating and forcing the existing sentiment into active opposition. His Hungarian colleague in the Agricultural Department shared his views. The Royal Imperial Agricultural Society of Vienna passed, unanimously, a motion in favor of legislation against United States agricultural products. The same opinions are prevalent in Germany, not only in agricultural, but in industrial circles. "Nothing is now needed," says a writer, "to crystallize this sentiment. The Dingley bill bears so heavily on certain exports from the countries of central Europe that one may look any day for concentrated efforts to control the exports to and imports from the United States."

During the last ten years, Europe took 80 per cent of all our exports—a proof, say writers here, that the United States is dependent for its prosperity and progress upon this huge demand. In its relations with the rest of the world, says one writer, the United States last year had a passive balance of trade—that is, a balance against it—while the trade with Europe shows the enormous balance in its favor of $417,600,000. The entire export trade to Europe was $777,800,000 and the imports $360,200,000. The writer above quoted continues:

> It is not necessary to say more. The United States is not as essential to Europe as Europe is to the United States. We can call on other parts of the world for what we need in the way of foods, raw products, etc. It is time to act. Measures must be taken to protect ourselves against the certain evils of a too tightly drawn tariff on our products. Protest has proven useless. The United States has heard, but has not heeded, Europe's or Asia's protests. It is for us to say whether we will wait to see if the new tariffs are as injurious as is expected, or whether we will grasp the only remedy that remains—retaliation. We have no doubt that the Bundesrath, representing as it does the diverse interests of the German Empire, will unite as one man, after careful consideration of all the facts, after weighing the injuries already done to German interests, to protect our farmers, merchants, and manufacturers.

It is curious that European nations will not see that all we demand is the right, which they exercise so freely among themselves,

to protect our agriculture, commerce, and manufactures. Europe can not understand the altered relations resulting from our industrial development. It is very disappointing to European manufacturers who have seen so much money formerly made by merchants doing business with the United States to watch that trade sinking, year by year, from figures expressed in hundreds of millions to millions, and, in some cases, to thousands.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *June 28, 1897.*

ENGLISH COTTON-YARN EXPORTS TO THE UNITED STATES.

The following statement shows the exports of cotton yarn to the United States from the consular district of Manchester (classified by count and fold) during the six months ended June 30, 1897:

Description and counts.	During month of—						Total.
	January.	February	March.	April.	May.	June.	
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Miscellaneous	602½	.....	1,046	3	.....	.....	1,651½
Harness twine	5,457½	1,530½	1,923¼	2,282½	1,014½	2,751½	14,960¼
Rovings	.....	6,231	42,451½	57,980½	26,890	12,337	145,890
10s	.....	.....	110	2,220	.....	.....	2,330
14s	.....	.....	.....	.....	.....	600	600
23s	.....	.....	869½	.....	.....	.....	869½
4-24s	.....	.....	.....	.....	1,005	.....	1,005
25s	61¾	322½	.....	296	.....	.....	680¼
4-27s	.....	.....	.....	2,160	660	.....	2,820
30s	.....	.....	901¼	551¾	1,069½	.....	2,522½
2-30s	.....	.....	1,394	2,416½	2,885	.....	6,695½
4-30s	.....	.....	.....	2,640	776¾	.....	3,416¾
31s	.....	.....	852¼	.....	.....	.....	852¼
4-33s	.....	.....	.....	3,562¼	.....	.....	3,562¼
36s	.....	521	.....	.....	.....	.....	521
4-36s	.....	.....	.....	2,226	.....	.....	2,226
40s	.....	.....	323½	3,580¼	240	920½	5,064¼
2-40s	493	933	550¾	12,289½	6,642¼	.....	20,908½
3-40s	221¾	1,594	.....	1,309	1,917½	1,227½	6,269¾
4-40s	.....	.....	.....	1,635¼	.....	.....	1,635¼
2-45s	216	.....	.....	5,314¾	.....	600	6,130¾
50s	510	600	.....	.....	.....	.....	1,110
2-50s	.....	.....	2,533	4,397¼	1,060¼	2,410	10,400½
2-55s	3,910	1,606½	.....	12,590	12,120	1,908	32,134½
60s	521	.....	2,530	529	110½	1,025	4,715½
2-60s	15,600	14,700	15,691¾	22,159¼	21,920½	20,014¼	110,085¾
70s	526	.....	499	620	.....	619	2,264
2-70s	23,000	19,500	35,500	13,217	19,515	29,160½	139,892½
75s	13,228	13,052	13,015	13,341	10½	.....	52,646½
80s	1,064	1,946	5,203	3,843¼	2,351	2,970	17,377¾
2-80s	12,048	8,042¼	7,036	43,607¼	8,030¼	17,470¼	96,235½
85s	.....	1,583½	.....	.....	.....	.....	1,583½

Exports of cotton yarn from Manchester—Continued.

Description and counts.	During month of—						Total.
	January.	February.	March.	April.	May.	June.	
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
90s	402¼	1,036½	820	2,154½	583	1,440	6,436¾
2-90s	1,500	2,123¾	513	2,871	1,458¾	1,000	9,466½
3-90s	446	.....	.....	99¼	51¼	5,752¼	6,348¼
2-95s	500	.....	.....	2,480	1,700	457¼	5,137¼
100s	600	.....	1,823	3,892	3,388	3,284	12,987
2-100s	6,200	5,765	6,176½	10,964¼	9,610¼	11,044¼	49,760¼
110s	1,154	756	584	2,894	579	786	6,753
2-110s	292½	1,999	.....	.....	.....	.....	2,291½
120s	.....	.....	491	.....	.....	469	960
2-120s	2,172¼	3,468¾	1,192¼	6,251¾	3,656¾	2,450	19,191¾
130s	551	262	.....	.....	.....	260	1,073
140s	556	268	.....	.....	.....	110	934
2-140s	273½	.....	100	.....	53	315	741½
2-145s	359	.....	614¼	.....	600	605	2,178¼
150s	246	420	113	363	.....	.....	1,142
2-160s	163	.....	.....	201½	.....	11	375½
2-180s	211	50	.....	100	387	100	848
All other counts	202	.....	560½	2,104¼	602¾	498	3,967¼
Total, 1897	93,082½	89,305½	145,418¼	249,147¼	130,888¾	122,595½	830,643¼
Total, 1896	174,151½	155,673	141,571	107,473	121,641¾	92,484	792,994½

WILLIAM F. GRINNELL,

MANCHESTER, *July 15, 1897.* *Consul.*

AGRICULTURE AND TRADE IN PLYMOUTH.

The weather of late has been very favorable for agriculture. After the plentiful winter and spring rains, May came in dry and cold, which enabled farmers to get in the mangolds and grass seeds, roll their corn and weed it. Then came warm weather. The alteration in the wheat plant, especially where top dressing had been used, was soon seen; then, with welcome rain, spring corn and mangolds sprung up, the growth being too rapid for flies to do any damage.

The hot weather lately prevailing has enabled grass and trifolium to be cut and got in; the crop, excepting clover, is abundant and in splendid condition. Potatoes everywhere look well, and the orchards promise more than an average crop. Garden crops and fruit, especially strawberries and currants, are almost unparalleled.

Devon farmers are prohibited by their leases from raising two corn (grain) crops in succession, which accounts for the fact that samples grown in Devon are sold at a lower price than those of Norfolk. Devonshire farmers are unduly handicapped by these conditions of leases. The crop of straw is heavy, and this will be a boon to many,

as for two or three seasons hay and straw have given very light crops.

The cattle trade is brisk. Grain is dull. Dairy produce is very cheap and competition keen.

Trade has considerably increased, the total value of exports to the United States from this district being $496,930.84 for the year ended this date, as compared with $344,092.10 for the previous year, being an increase of $152,838.74.

The area of the borough of Plymouth is now 1,491 acres; population, 90,340; ratable value, £348,932 ($1,698,077); number of houses, 11,080.

The number of births during 1896 was 2,643 (rate, 29.3); deaths, 1,769 (rate, 19.4); marriages, 909. There were 104 illegitimate births recorded.

Plymouth is still deficient in the matter of public baths and wash-houses. The small percentage of the population able to swim is astonishing, especially in a seaport town. Of 4,000 boys in the elementary schools, between the ages of 7 and 14, only 300 are able to swim.

A public mortuary has now been completed. The buildings include a coroner's court and two mortuary chambers, with ample accommodation for eight bodies; also, a fully equipped room for necroscopic examinations. The walls of the mortuary chambers are lined with white tiles on three sides; on the fourth side is a plate-glass screen, through which bodies may be viewed by the jury or identified by friends under less objectionable conditions than those obtaining in most places. The floors are of concrete rendered with cement and laid so that the fall of the surface is to a stoneware gully trap in one corner of each chamber. The slabs for supporting the bodies are of slate upon white glazed-brick supports.

THOMAS W. FOX,
Consul.

PLYMOUTH, *June 30, 1897.*

NEW METHOD OF RETTING AND DRYING FLAX.

Mr. Doumer, professor of the medical faculty at the university at Lille, and Mr. De Swarte, the engineer of the central school at Paris, found a method of, and obtained a patent for, retting and drying flax in factories. It is well known that flax of the same quality retted in the same water and with the same outside temperature very often gives different results. The inventors thought that this difference was due to the influence of the micro-organisms which are formed by the fermentation of flax during its retting and which decompose the gluten of its stem. Mr. Doumer, who paid special

attention to this part of the question, found that, together with the micro-organism indispensable in the retting of flax, and known under the name of "bacille amylobacter," other micro-organisms develop in the water during the operation, which have a very noxious influence and destroy the amylobacter bacillus. Investigations were then made in order to find a method for an artificial development of the amylobacter bacillus. It was not only found possible to produce this bacillus, but it was discovered that the temperature necessary for fermentation during the artificial production of the bacillus is such that it kills the embryo of all other micro-organisms and consequently destroys the noxious influence of the same.

So far as the flax industry is concerned, the retting of flax in factories is important only when the retted flax can be dried there. Should it be otherwise, *i. e.*, should the flax be dried only by stretching it in the sun, the above procedure could take place only in summer. With this in mind, the inventors constructed a building in which the decomposition of the fiber, with the aid of the amylobacter bacillus, and its drying occur simultaneously; and the whole operation lasts five days. It can be stated that, with this new method, flax even of low grade turns out a very good fiber. A commission specially appointed by the French Ministry of Agriculture for the purpose of investigating this new method reported officially that flax retted according to the old system gives yarn No. 70; and if the same flax is passed through the new apparatus of Mr. Doumer, it produces yarn No. 90. Comparing the solidity of the yarns produced from flax retted according to the old method with the flax which was passed through the new apparatus, the commission reached the following results (solidity according to dynamometer):

Number of yarn.	Flax, under old method.		Flax, from the new apparatus.	
	Kilograms.	*Pounds.*	*Kilograms.*	*Pounds.*
50	0.99	2.182	1.112	2.45
60	0.791	1.743	0.844	1.86
80	0.525	1.157	0.632	1.39
90	0.409	0.9	0.562	1.23

A few days ago, the construction of the first factory was commenced near Lille. This factory is to have a tank which is to contain 2,000 kilograms (4,409 pounds) of fiber under the new method of retting and drying flax. If this method justifies the expectations regarding it, it will be of great advantage to countries producing flax, and especially to Russia, where flax culture forms one of the principal branches of farming.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *July 19, 1897.*

RUSSIA'S INDUSTRIAL DEVELOPMENT.

My reason for constantly reminding our merchants and manufacturers of the needs of Russia is because I believe this market to be one of the very best for our manufactures. Since Germany and Russia signed their last trade treaty, Germany's exports to her northern neighbor have rapidly increased. In the last three years, the position of Germans in the Czar's Empire have changed for the better. The Czar's choice of a Minister for Roads, Canals, and Communications was fortunate for Russia and very favorable for Germany. Michael Chilkoff, the new minister, is one of Russia's most reliable and able men. He has climbed by hard work, skill, and perseverance from a place in the ranks to the head of a large and important department. Besides having been abroad many years, during which time he fitted himself by study for his present position, he has kept in touch, by means of letters, circulars, and literature, with all that was going on in other countries. He had every opportunity offered him to see and study Germany's industrial systems, especially the branches in which he was most interested. The best side of its manufactures was impressed upon him. He was told how willing and able Germany was to fill all his wants. Richard Hartmann, formerly head of the famous house in Chemnitz now known as the Saxon Machine Company, was one of the first to find out how to make friends with the Russians. He urged the use of German capital in Russia. Not satisfied with the orders that, for twenty or thirty years, had contributed to the success of the company, he urged the building of a large factory in Russia for making locomotive boilers, etc. By his initiative and by the aid of the Dresden Bank and the St. Petersburg International Bank, funds were guaranteed or furnished. With these in his hands, Hartmann went to the Russian Government for concessions. He asked permission to put up a mill with great capacity in the valley of the Don or in central Russia. His propositions were favorably examined, although two years passed before a report was returned. The delay was due to the efforts of Russian manufacturers to defeat him; they feared competition. When, at last, the privilege was granted, Hartmann asked for guaranties against failure. Before he would build, he requested large government contracts for at least six years. A commission, consisting of some of Russia's most distinguished engineers, was appointed to consider the matter. The commission strongly advised the Russian Government to give Hartmann not only concessions, but contracts

for 6,000,000 rubles' worth of all kinds of railroad material. The Russian imperial council signified, in May, 1896, its willingness to have Hartmann's company go to work, provided that the company be Russian, under Russian control, and have a Russian constitution and by-laws. This was agreed to. The articles of agreement, statutes, etc., received imperial approval, and Mr. Hartmann put up a large metallurgical factory in Lugansk, in the Don country, a place very well adapted to his purposes. The building is being pushed forward with such energy and skill that it is expected to be finished this fall.

Most of the machinery needed in this new mill has been made or is now being made here in Chemnitz by the Saxon Machine Company. In all or much of this, it is not hard to trace the hand of Minister Chilkoff. One must not forget that Russia's great need just now is factories for furnishing materials for the great network of railroads, canals, and roads in course of construction all over the Empire.

The Belgian, English, and French factories, erected in various parts of Russia, furnish the most modern machines, but they by no means begin to supply the demand. Everywhere, railroads, canals, and bridges are being built or projected, mines are being opened, and lands are being developed. The Caucasus, the Urals, Siberia, and the oil country about Baku and Batum offer every opportunity to energetic efforts. The country is so like our own, and its needs are so analogous to those of the United States, that every honest effort to gain trade must meet with sure and safe, if not quick, returns. While a knowledge of the Russian language is not essential, merchants and manufacturers would act wisely and well if they would choose agents who understand it. Unfortunately, it is one of the hardest of all tongues. Almost all the large business men, etc., speak German and French.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *June 6, 1897.*

WAGES AND AGRICULTURAL MACHINERY IN RUSSIA.

WAGES.

The Messenger of Finances has published very interesting data as to the wages earned by hand laborers in different localities, as will be seen by the table given further on. It seems that the demand for hand labor has decreased, especially in the grain-growing regions. The average of wages paid this year is fair, but in the governments

of southern Russia it is less than during preceding years, especially for workmen with horses. For instance, the daily wage of a workman with a horse in the district of Berdiansk in May, 1896, was 2.80 rubles,* and in June, 2 rubles; but this year, it is only 1.60 and 1.40 rubles, and, in comparison with 1895, the difference is still greater. Only in some localities was there a temporary advance in wages for certain kinds of work, partly on account of the rainy weather; thus, in the Ushitsk district, the prices for hoeing maize and poppies were raised, and in the district of Tsarev, the wages paid to women advanced during the period of weeding melons.

The following table shows daily wages paid to workmen, without board, in some of the districts, especially in southern Russia, during the last three years:

Districts.	1895.		1896.		1897.	
	May.	June.	May.	June.	May.	June.
	*Copecks.**	*Copecks* *	*Copecks.**	*Copecks.**	*Copecks.**	*Copecks.**
Nikolaevsk	.....	50 to 80	30 to 80	50 to 80	50	.....
Karsunsk	20 to 40	25 to 30	28	30 to 60	40	40
Dnieprovsk	.....	.....	.....	60	60	60
Berdiansk	75	80	70	65	60	60
Bendersk	55	.....	51	55	52	52
Beletsk	40 to 80	45 to 80	40 to 60	40 to 60	40 to 50	30 to 50
Briansk	30 to 50	50	30 to 50	.....	30 to 60	.....

* 1 copeck=one-hundredth of a ruble, or 0.0514 cent United States currency.

Unfavorable news about the condition of crops visibly decreased the usual movement of the workmen from the central governments. In some localities, workmen who left their homes in April and failed to find work are already returning. In the southern governments, there are enough workmen for the coming harvest. In the district of Berdiansk, the landowners refused to make contracts with workmen before the final ripening of the cereals. At the fair of the village Bolshoi-Tokmak, government of Tauride, a great number of workmen gathered, looking for work, and the wages offered were so low that many of them preferred to return home. Nevertheless, the movement of workmen to that region continued until the second half of May, in the expectation of harvesting cereals, and, meantime, they undertook all kinds of small work, receiving, for example, for weeding, 25 copecks a day. The building of the Syzran-Ruzaevka railroad line caused a rise in the wages of daily laborers in the neighboring localities.

The table following shows wages paid to workmen in the different provinces, which will give the people of the United States an idea of how much a peasant in Russia can save from his earnings.

* The consul-general gives the value of the ruble as 51.4 cents.

Rate of wages.

Description.	Nishni-Volga.		Central Volga.	
Daily.	*Rubles.*		*Rubles.*	
Man, with horse	0.80 to 2.00	$0.41 to $1.02	0.50 to 1.20	$0.25 to $0.61
Man	.35 to 1.00	.17 to .51	25 to .65	.12 to .33
Woman	.20 to .40	.10 to .20	.15 to .40	.07 to .20
Monthly.				
Man	7.00 to 15.00	3.59 to 7.71	4.00 to 12.00	2.00 to 6.00
Woman	2.00 to 10.00	1.02 to 5.14	3.00 to 5.00	1 54 to 2.57

Description.	Southern steppe.		Central agricultural.	
Daily.	*Rubles.*		*Rubles.*	
Man, with horse	0.80 to 1.60	$0.41 to $0.82	0.40 to 1.30	$0.20 to $0.66
Man	.40 to .60	.20 to .30	.20 to .60	.10 to .30
Woman	.25 to .40	.12 to .20	.12 to .40	.06 to .20
Monthly.				
Man	6.00 to 9.00	3.00 to 4.60	4.00 to 15.00	2.00 to 7.71
Woman	6.00 to 7.00	1.54 to 3.59	3.00 to 7.00	1.54 to 3.59

In the other governments, the rates are slightly less. The daily wages mentioned above are reckoned without board. When board is given, the wages are reduced by a few cents—10 or 12 cents for a horse.

The annual wages vary from 25 to 100 rubles ($12.75 to $51.40) for a man, the average being, perhaps, about 60 rubles ($30.84). The annual pay for a woman is from 20 to 60 rubles ($10.80 to $30.84).

AGRICULTURAL MACHINERY.

The reports on the condition of agriculture in the different regions give interesting information concerning the increased use of agricultural machinery and implements. In the southern steppe governments, perfected methods for the cultivation of fields and for harvesting are gradually becoming widely employed. The distribution of agricultural machinery is especially successful in the governments of Tauride, Kherson, and Ekaterinoslav, where it is introduced by German colonists and by some of the most important landowners. In the villages of the Berdiansk district, separate farmers, having sowing fields of 30 to 35 dessiatines (80 to 94 acres) already use drills; in the Odessa district, nearly every wealthy peasant has mowing machines and some have drills and steam thrashers. In the Volga regions, drills are found, but at present, iron plows of different kinds are in the majority, and, little by little, are replacing the wooden plows. The report from Novouzensk says that in that district the sokha is no more in use. The sokha is the Russian wooden plow, with two plowshares and a mold board, but with no plow point The shares, fixed to a wooden beam attached to two wooden shafts,

are of different forms, according to the soil to be plowed. Sometimes they are very narrow, have the form of a chisel, and are used for stony and compact ground; sometimes they are wide, triangular in form, and are used for soil that is soft and free of stones.

In central Russia, the iron plow is also being introduced more and more. The report from the district of Mstislav, government of Moghilev, says that the employment of the plow by the peasants has met with success, and attributes these instances of progress to the activity of the depot of agricultural machines and implements of the Mstislavsk Society of Farmers. In the Kama region, the local zemstvos make efforts to spread the use of agricultural machinery. A report from Urzshum says that thrashing and winnowing machines are in great use, and praises the winnowing machines of peasants' make. The thrashing machines, produced by the Kazan firm of Ram & Co., are not liked by the farmers, on account of their not being durable. But the report of the Oster district says that not even plows are used there, and the farmer does not wish to know anything about complicated machinery, on account of the low prices of the field products and the high prices of the machinery.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *July 27, 1897.*

THE RUSSIAN COASTING TRADE.

A very important measure in regard to the coasting trade between Russian ports, and having for its object to benefit vessels sailing under the Russian flag, was sanctioned by the Emperor last May, and will take effect on the 1st of January, 1900. Heretofore, the Russian coasting trade has been free to vessels from any country, but after the said date it will be limited to Russian vessels, with the exception of the transport of salt from the ports of the Black Sea and Sea of Azov to the ports of the Baltic. A similar law had already been passed in 1830, but, on account of the insignificance of the coasting trade then, it remained a dead letter, and said trade was left unprotected from foreign competition until now. The coasting trade has developed to a large extent, and Russia, recognizing, in common with other countries, the importance of the commercial marine, is making great efforts to encourage it and is adopting measures to place her coasting trade exclusively in the hands of her national flag.

Owing to the isolated situation of the seas surrounding Russia, separated as they are by foreign territories, the Russian coasting trade must cover long distances, such, for instance, as the United

States trade between New York and San Francisco, which must pass around South America. Although not enjoying any privileges, the Russian coasting trade was always increasing, and during the period from 1888 to 1895 it more than doubled.

In regard to freeing the Russian coasting trade from foreign vessels, the Journal of Commerce and Industry of St. Petersburg says:

By removing foreign flags from the Baltic-Black Sea, White Sea-Baltic, and Black Sea-Pacific Ocean communications, our navigation without doubt will greatly develop. Besides transit cargoes, which will be in the exclusive possession of Russian subjects and Russian vessels, foreign cargoes can be forwarded under the most favorable conditions. In estimating the influence which the transport of cargoes in transit may have on the success of the navigation trade, it must be considered that the lines between our seas include important foreign connections where a considerable amount of our cargoes are transported on foreign vessels. Therefore, it is to be concluded that a well-developed coasting trade will prove a good preparatory school for a further, wider, and more independent activity of our merchant marine in the international market.

The Messenger of Finances asserts, and is trying to prove by statistics, that the prohibition of foreign vessels will not injure the Russian coasting trade and that the Russian vessels will be sufficient even in case of increased commerce.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *August 14, 1897.*

CATTLE MARKET IN RUSSIA.

The hard times which cattle breeders are now experiencing are responsible for a number of plans to increase the export trade. An interesting article was published in the Pester Lloyd regarding the cattle industry in Austria-Hungary. The following is an extract:

We can not but welcome the tendency of all countries to sell their live stock to foreign markets, because the general social-economic condition of the country is improved thereby. Owing to the commercial treaties of 1891, which opened the markets, the export of Austria-Hungary increased greatly. The number of cattle exported amounted in 1894 to 1,072,792 head, of a value of 82,000,000 guldens ($33,292,000). Such a large sale of Austro-Hungarian cattle caused the development of cattle breeding, and the organization of industrial and farming establishments for the feeding of cattle. But the measures taken after 1894 lowered the export trade and the prices. At the end of 1896, the export decreased to 314,448 head, of a value of 23,000,000 guldens ($9,338,000), and thus the loss amounted to 59,000,000 guldens ($23,954,000). The cause of this decrease was the police-veterinary measures adopted to prevent the spreading of the epizooty. These measures also necessitated the establishment of export markets for cattle. The aim of these markets is to accept cattle only from localities free from the murrain, and after they have passed a strict veterinary examination. In order to protect the markets from contagion from neighboring localities, it is necessary to organize branch establishments. The meeting of the Galician cattle breeders, which took place some days

ago, decided to organize such a market in Krakov: but this is not considered a good choice, as Galicia supplies Prussia only with swine, and should the demand for the same decrease, the existence of a market in Krakov would be useless. Another inconvenience is that Krakov is situated far from the principal foreign markets.

Vienna is the best place to establish a market to reach the western regions. Here cattle can be concentrated, and the foreign purchaser can choose from Galicia, Bukowina, Hungary, Bohemia, Moravia, Silesia, and the interior Austrian provinces. The local butchers and provincial purchasers will be inclined to satisfy their needs here, all the more since they will not be permitted, after the opening of an export market, to buy at the Vienna local bazaar; the exporter, however, has the right to sell his stock at the latter if he has not sold it at the export market.

The only objection to the establishment of this market would be the danger of contagious disease among cattle brought from all the different countries. But this could be avoided by better veterinary and sanitary regulations. The governor of Lower Austria has petitioned the burgomaster of Vienna to establish this export market. A special committee of the Vienna Agricultural Society recommended a place in the neighborhood of Vienna. Another question—the establishment of a larger slaughterhouse in connection with the market, in order to give exporters, who can not sell their cattle alive, the opportunity of selling beef—was discussed at the same meeting.

In conclusion, the article says that a critical moment for the Austro-Hungarian cattle breeders has arrived. Prices have reached the minimum, and if conditions do not improve, the future of the cattle industry will be seriously injured.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *August 11, 1897.*

PETROLEUM IN VENICE.

The only firm in Italy handling United States petroleum is a company called the Sociéta Italo-Americana.* This company was formed about six years ago through a combination of the firm of B. Walter & Co., of Venice, who, for some time previous, had enjoyed a monopoly of the petroleum trade here, and the Standard Oil Company, of the United States, and has a paid-up capital of $454,545.50 (2,500,000 lire). This company handles Russian as well as American oil, and, besides the principal plant in Venice, has one at Savona and one at Arth-Goldau, in Switzerland. The workshops in this city are situated on an island called the Sacca Sessola, and are directly connected with the railway station. The construction of this plant was commenced in 1886, at which time three tank reservoirs of 2,000 tons capacity were built. At the present time, there are six tanks, of a total capacity of 12,000 tons.

Since 1889, petroleum has been brought to this port in tank

*The consul says, in the accompanying dispatch, that the report was compiled from information courteously furnished him by the director of the company.

steamers, the company owning two vessels, one of about 4,100 tons and the other of about 2,000 tons oil-carrying capacity, the latter being used almost exclusively for the transportation of Russian oil from Batum. These two steamers are the actual property of the company, and are of English construction, but, for certain reasons, it is found more convenient to have them sail under the German flag and appear as belonging to a German company.

For the transportation of petroleum overland, the Italian railways supply two hundred tank cars. In Switzerland, however, the company has its own tank cars (six in number) for carrying oil in bulk.

Petroleum is usually sold to the trade packed in tin cases, which are manufactured by the company at its Venice and Savona plants, the total output of such cases being about 2,000,000 per annum. Most of the tin plate used comes from Italian factories, only a relatively small portion being purchased from England.

Since the organization of the Sociéta Italo-Americana, I am informed that the imports of American petroleum have increased, although the total imports have decreased, this decrease being due to the fact that formerly large transshipments of Russian oil for Switzerland were made at Venice, while this country is now better and more advantageously supplied with the American oil directly from the company's Savona plant.

Petroleum is found to some extent in Italy in the province of Piacenza. A refinery exists at Fiorenznola d'Arda, whose production is about 150,000 cases, or 30,000 barrels, annually. This domestic oil, for the past few years, is taxed at the rate of 10 francs per 100 kilograms ($1.93 per 220.46 pounds), against a duty of 48 francs per 100 kilograms ($9.26 per 220.46 pounds) levied on American and Russian petroleum.

A company of French capitalists has been organized for the handling of Italian oil, the shares being held in Paris. As is evident, the high duty placed on the foreign article enables this company to pay abnormally large dividends to its shareholders, while the article they supply is in every way inferior to the American or Russian oil.

As one has never seen Italian petroleum advertised for sale, and as all petroleum cases or barrels that can be obtained bear labels written in the English language, it is highly probable that this inferior article is sold to the public as American petroleum. The same is true of Russian petroleum, as I am confident that no one can testify to ever having seen posted in any place where it is for sale the notice "Russian petroleum," while in nearly every grocer's shop in Italy can be seen the notice, "American petroleum for sale." I would earnestly suggest that some action be taken by the proper authorities

to prevent this fraudulent masking of a spurious and dangerous article under the name of American petroleum.

The total quantity of petroleum consumed in Italy for the years 1894–95 was as follows:

From—	1894.	1895.
	Tons.	*Tons.*
Russia	11,300	15,800
America	62,800	52,800
Total	74,100	68,600

Besides the Government duty, each city puts an additional tax of 6 francs per 100 kilograms ($1.15 per 220.46 pounds) on all petroleum consumed. The consequence is that the consumer pays a tax amounting to something like 400 per cent ad valorem on every liter of oil he consumes. It is readily seen that, owing to this enormous duty, petroleum can be used only where it is a necessity—that is, for illuminating purposes. I am convinced that, were this excessive duty reduced, petroleum would be used for other purposes, and the imports would largely increase, with a proportionate augmentation of revenue to the Italian Government.

Most of the Russian petroleum imported is consumed, I am told, in this region, where it is preferred on account of its being cheaper than the American oil.

The qualities of the American oil sold here are the ordinary standard white and the so-called water-white oil. There is but one quality of Russian oil imported, the color of which answers to "prime white."

H. A. JOHNSON,

VENICE, *June 23, 1897.* *Consul.*

ARTIFICIAL BLACK MARBLE.

A new discovery has been made by a Calabria engineer—the manufacture of artificial black marble—and this industry is now being carried on here in Catania by the firm Tortorici & Grasso, who are the owners of the gas works and manufacture various by-products. The artificial marble has been patented in Italy and other countries. I send herewith a sample (a small column*). It can be made into any form desired, and fully takes the place of black marble, resembling it so closely that it is difficult to distinguish it from the real article, while its cost is said to be very much less.

The process is said to be as follows: Common white sandstone

* Filed in the Bureau of Foreign Commerce, Department of State.

is first cut into the desired shapes; then the various pieces are placed in a large, square iron tank, upon a heavy wire grating, the latter resting a few inches above the bottom of the tank, in order to keep the stone from touching the bottom and to permit the fluid to penetrate freely everywhere; the stones must not touch each other. Then, through an iron pipe, a molten mass of volcanic asphalt and coal-tar pitch, mixed, I believe, in equal parts, is let into the tank from an adjoining boiler until the molten mass fully covers the pieces of sandstone. This liquid is kept boiling in the tank for thirty-six hours; then the stones are taken out, placed upon a brick floor to cool off and dry, and are afterwards polished in the same manner as other marble.

The artificial product is said to resist acids, is not damaged by atmospheric action, moisture, heat, or cold, and is claimed to be aseptic.

In the same manner, the firm also prepares pressed tilings for flooring, roofing, etc., which are said to be perfectly water-tight and aseptic.

I am told that a mass of sand, cement, and water, after having been thoroughly kneaded, is put into forms, put under a press, which works quite rapidly, taken out and dried awhile, and then placed in the tank boiler for thirty-six hours, as in the manufacture of the artificial black marble, and, after being cooled off, is placed in a rotary grinding or polishing machine. This machine consists of a large, round, stationary grindstone, upon which revolves an iron frame, with partitions therein for holding the tiles in place.

LOUIS H. BRÜHL,

CATANIA, *August 10, 1897.* *Consul.*

OPENING FOR AMERICAN WINDMILLS IN GREECE.

Business is practically at a standstill in this country, owing to the financial results of the late war and the slow progress of the peace negotiations. It might be interesting to know, however, that there is a chance now of introducing American windmills into Greece. A reliable Athenian firm has expressed its willingness to take the agency and push the work. It will buy and erect immediately one windmill in a conspicuous location near Athens as a sample, and is confident that it can sell others. The firm wishes to proceed very carefully, however, in its choice of this sample, in order to get the mill that will work best under the conditions. The members of the firm wish to deal with an American establishment, because they believe that the Americans excel in the construction of this article.

The islands and mainland of Greece possess innumerable small

farms, laid out in vineyards, vegetable gardens, orange and lemon groves, etc. The soil is invariably rich, but the important question is always that of water. Water is usually found near the surface and is supplied to the land by means of wells, worked by crude machinery with mule or horse power. Many of the land proprietors are well to do and could afford windmills if the subject were properly laid before them. Greece is so cut up by the sea that there is hardly a day in the year without a breeze. During certain seasons, July and August in particular, the wind is strong and steady. A mill so constructed that it will work either in a light or strong wind is needed.. It would also be more salable if it could perform services other than the mere drawing of water, such as grinding grain, etc.

I append a table, based on observations extending over ten years, showing the annual rainy days and rainfall at Athens. The rainfall is expressed in lines (Paris measure—5½=5 lines English):

Months.	Number of rainy days.	Rainfall.
		Lines.
January	13	25.2
February	19	16
March	11	17.3
April	8	7.9
May	6	8.8
June	4	6.8
July	2	4.2
August	3	3.7
September	4	6.3
October	9	22.1
November	13	39.4
December	13	25.9
Total	95	183.6

At the time of the strong northeast winds, during July and August, the soil attains a heat of 165° F.

All catalogues, information, etc., should be sent either to me or to Mr. Edward Hogg, Athens.

GEORGE HORTON,

ATHENS, *July 29, 1897.* *Consul.*

DEVELOPMENT OF THE STRAITS SETTLEMENTS.

I submit herewith an article with regard to the growth and development of the colony of the Straits Settlements and adjacent protected native states during the past sixty years.

By agreement between the British Government and their respective rulers, the native states referred to* were federated in 1895, and,

*Perak, Selangor, Pahang, and Negri Sembilan.

under the supervision of a resident-general, made directly dependent upon the chief colonial authority at Singapore. The facilities which this will afford for a more uniform system of administration, especially in the matter of internal improvements, must naturally tend to accelerate the opening up of the territory in question, with its abundant mineral and timber resources and vast agricultural possibilities.

E. SPENCER PRATT,
Consul-General.

SINGAPORE, *June 28, 1897.*

[From the Straits Times, Singapore, June 21, 1897.]

Sixty years ago, the British possessions in Malaya consisted of Penang (then officially known as Prince of Wales Island), Province Wellesley, the island known as the Dindings, Malacca, and Singapore. Penang had been ceded to the East India Company by the Rajah of Kedah in 1786; Province Wellesley was purchased for $2,000 in 1800; the Dindings Island was ceded to the company in 1826, although not occupied till long afterwards; Singapore was founded by Sir Stamford Raffles in 1819; and Malacca was finally ceded by the Dutch in 1825.

Singapore enjoys the distinction of having been a free port from the very commencement, and to this fact not less than to its geographical situation must be attributed the rapidity of its growth and its increasing prosperity. In 1839, it formed the base of the expedition dispatched to take part in the first China war. This was the first recognition of the strategic value of the port for a British fleet in China waters.

On the 1st of April, 1867, the Straits Settlements became a Crown colony, and Sir Harry Ord was appointed governor. During the last thirty years, the internal history of the Straits Settlements has been merely the record of quiet progress and moderate legislation, disturbed only by the discontent caused by the increasing pressure of the military contribution, which, being paid in sterling, rose as the dollar fell, and by the occasional ventilation of grievances from Penang, which culminated in 1893 in the presentation of an unsuccessful petition to the Secretary of State praying for the appointment of a royal commission to "investigate into the past administration of each of the settlements forming the colony, the relations existing between them, and their respective utility in the desirable extensive development of the protected native states."

Since 1866, considerable extensions of territory have been made by cession to the British Government and indirectly by the protection afforded to native states. In 1888, British North Borneo, Sarawak, and Brunei were placed by their respective governments under British protection, and the governor of the Straits Settlements was subsequently appointed high commissioner; but the connection with the colony is little more than nominal. The protection of the Malay States and the growth of wealth and civilization in them are matters of such eminent importance that they fall to be dealt with separately. Before we approach the consideration of that topic, we propose to make a short survey of the general progress of our colony under a few distinct heads.

POPULATION.

The population of Singapore, Penang, Province Wellesley, and Malacca sixty years ago was 143,700, the population of Singapore being 29,984, of which 141 were Europeans. Thirty years later, the population of the Settlements had risen

to 273,000, while, according to the report of the registrar-general for this year, the estimated population for the year 1896 is 548,536. We give the estimate in extenso:

Settlement.	European.	Eurasian.	Chinese.	Malay.	Indian.	Others.	Total.
Singapore	5,779	3,946	134,067	39,562	17,631	1,944	202,929
Penang	1,202	1,597	70,879	39,440	21,907	1,461	136,486
Province Wellesley	108	275	23,082	69,850	16,390	460	110,165
Dindings	6	8	974	2,527	279	10	3,804
Malacca	144	1,819	18,749	72,594	1,689	157	95,132
Total	7,239	7,645	247,751	223,973	57,896	4,032	548,536

But the increase of population, great as it is, is small compared with the remarkable development of our trade during the Queen's reign. If the population is nearly quadrupled, the trade of the Settlements has increased more than ten times.

TRADE.

The following table of exports and imports, excluding treasure, shows their respective values in silver dollars for 1836 and 1896, in round numbers:*

Settlement.	1836.		1896.	
	Imports.	Exports.	Imports.	Exports.
Singapore	$6,130,000	$5,676,000	$137,220,000	$114,631,000
Penang	3,031,000	2,623,000	47,058,000	44,861,000
Malacca	599,000	318,000	1,918,000	2,285,000
Total	9,720,000	8,617,000	186,196,000	161,777,000

This table shows an apparent increase of nearly twentyfold, but the fall in the value of the dollar must be taken into consideration. The sterling value of the total imports and exports, excluding treasure, is, approximately, for 1896, £20,219,000 ($98,395,664) and £17,566,000 ($85,484,839), as against £1,944,000 and £1,723,000 for 1836. The gross total of imports and exports, including treasure, in 1896 are returned in the annual trade report for that year as $221,478,247 and $184,297,580, respectively.

It need hardly be said that the revenue of the colony has also largely increased. Under the East India Company, the Settlements did not pay their way, at least to the extent of reimbursing to the company its military expenditure, but they were not expected to do so. In 1863, stamp duties were imposed with a view to diminish the annual deficit from this source, and realized upwards of $26,000 in the first year. The revenue of the colony for the first complete year after the transfer to the Colonial Office was $1,301,843. In 1896, the revenue for 1897 is estimated to amount to $4,008,735, not including the native states. The municipal estimates for 1897 show an estimated revenue, including credit balances, of $894,300 for Singapore and $355,499 for Penang.

The currency question has been to the front on more than one occasion. The trade currency of the Settlements has always been silver dollars, but the official currency under the Indian Government was rupees, annas, and pice. Two of the

* In a report dated Singapore, April 30, 1896 (Commercial Relations, 1895-96) Consul-General Pratt says the Mexican dollar is used in the Straits Settlements. Its value on January 1, 1896, was 53.3 cents.

first batch of acts passed by the newly constituted colonial government in 1867 were: An act for declaring dollars and proportionate parts of dollars in silver and copper to be legal tender, and an act to provide for conversion of rupees in all payments by or to the government and for the payment of salaries of public officers in dollars and cents and for keeping the public accounts in dollars and cents. In June, 1893, the chamber of commerce debated the currency question at length; in March, 1894, that body voted for a British dollar; and, on October 16, 1894, a British dollar was sanctioned. According to the annual trade report for 1896, the British dollar has not achieved much success in the colony, and most of the imports (of British dollars) find their way to Bangkok. This, however, may possibly be accounted for by a rule of political economy commonly known as Gresham's law. A bill has been introduced to provide for the issue of Government paper currency.

THE MALAY STATES.

Satisfactory as has been the growth of the prosperity of the Straits Settlements during the thirty years of their existence as a Crown colony, it is but small compared with the extraordinary development of the protected native states of Perak and Selangor. The opening up of these states has, undoubtedly, added much, both directly and indirectly, to the importance of our colony. The methods, however, by which we attained an ascendency in the native states were very questionable from the point of view of an international lawyer, and it may well be doubted whether the native chiefs with whom we dealt would not have preferred savagery and sovereignty to prosperity and protection. The policy of the East India Company had been to interfere as little as possible with the chiefs of the peninsula. Such treaties as had been made and such intercourse as existed had reference almost entirely to commercial matters. The first Crown governor, however, Sir Harry Ord, made several attempts to interfere in native affairs, and went so far as to allege that the natives liked interference, and, indeed, "were disposed to regard an abstinence from such intermeddling as a proof of a want of interest in them."

The residential system has been brought into force in the whole of the Malay Peninsula south of Kedah and Kelantan, with the exception of the territories of Johore and Muar. But, however questionable may have been the methods of its imposition in the first instance, however contrary to the canons of noninterference laid down by professors of international law, the actions of Sir Harry Ord and Sir Andrew Clarke may have appeared to secretaries of state, who learned what had been done too late to undo it, and however hardly our policy may have pressed upon individual rulers, who found themselves supplanted by rivals willing to exchange despotic rights which they had not got for the sovereign name which we were ready to bestow on them—yet it can not be doubted that our protection of the native Malay states has been of incalculable advantage, both moral and material, to chiefs, people, and country. If ever it did so, in this case the end justified the means. Twenty-three years ago, Perak and Selangor were huge jungles teeming with undeveloped wealth, whose only roads were rivers and jungle paths; to-day, they are civilized states, with a well-organized government, a revenue counted in millions, roads, telegraphs, and railways, and a population probably treble of what it was twenty years ago.

PROGRESS IN PERAK.

The history of Perak, since the war, has been a record of quiet development and progress. The revenues have risen from $273,043 in 1876 to $3,960,871 in 1896. This is mainly derived from an export duty on tin. The value of the tin exported from the state in 1895 was nearly $14,000,000. However, the Government of Perak have been fully alive to the desirability of developing other sources

of wealth besides tin, having in view the possible future failure of the tin mines, and do as much as can be expected of Government to encourage agriculture. In 1895, rice to the value of $2,624,189 was imported into Perak, and rice to the value of $35,451 was exported, while there are thousands of acres of waste lands said to be suitable for the production of rice at present lying idle. A small quantity of tea has been grown for some years past, and sugar to the value of $798,592 was exported in 1895. Coffee is now being grown in largely increasing quantities, and it is believed by the planters that, but for the neglect of the Straits merchants, Perak coffee would fetch as high a price as any in the market. Turning now to the means of communication in Perak, we find that this State has the honor of possessing the first Malayan railway. A trial cutting was made in 1881 between Port Weld and Taipeng, and the line of 1-meter gauge was opened for traffic on the 1st of June, 1885. The line was extended to Kamunting in May, 1890, and to Ulu Sapetang in June, 1892. The Kinta Valley Railway, starting from Teluk Anson, now runs through Batang Padang to Batu Gajah and Ipoh, and thence to Chemor. The first portion between Teluk Anson and Batang Padang was opened in May, 1893, and the last portion, between Tanjong Rambutan and Chemor, was opened in November last year. Further surveys and extensions are in progress, and it is intended to connect the Selangor Government Railway at Kuala Kubu with the Perak system at Tapah. The profits on capital expenditure in 1895 were, on the Larut Railway, 3.32 per cent, and, on the Kinta Railway, 5.36 per cent. Telegraphic communication now exists with Kuala Prai, in Province Wellesley, and thence by cable with Penang on the one side and with Selangor, Sungei Ujong, and Malacca on the other. The total length of telegraphic and telephone lines, exclusive of railway lines, at the end of 1896, was 630 miles. The development of the post-office in Perak is very remarkable; in 1881, 17,327 covers passed through the post-offices, while, in 1895, the number was 2,057,023. Nor have the roads been neglected. There are now 360 miles of metaled cart roads, 115 miles of unmetaled cart roads, and 541½ miles of bridle paths. Public buildings have been erected in the various district headquarters, but the principal are to be found at Batu Gajah and at Taipeng, which latter town boasts of a museum, under the charge of a very learned curator. Taipeng, Teluk Anson, Parit Buntar, and Kinta are supplied with water from waterworks in the vicinity.

SELANGOR.

The revenue of Selangor amounted, in 1895, to $3,805,211. The population, in 1894, was estimated at 150,000. Coffee, rice, sugar, pepper, and gambier are being grown with success, but the chief industry, as in Perak, is tin, of which (including ore) 420,088 piculs were exported in 1895. A meter-gauge railway between Kuala Lumpor and Klang was opened in 1886, and the last extension to Kuala Kubu was opened on the 6th of October, 1894. A branch line from Kuala Lumpor to Sungei Besi was opened on the 28th of February, 1895. The profits on the main line in 1895 were 11.06 per cent on the capital expenditure. The Kuala Lumpor waterworks were opened in April, 1895, and a new government office and jail have been erected. Four hundred and thirty-three miles of public roads were maintained in 1895 at a cost of $150,363. The State maintains 332 miles of telegraphs, including 56 miles in Pehang.

NEGRI SEMBILAN.

The Negri Sembilan now includes Sungei Ujong and Jelebu, a confederation having been established on the 8th of August, 1895. The revenue of the confederation amounted to $535,444 in that year, of which Sungei Ujong and Jelebu contributed $389,111. A railway between Port Dickson and Seremban was opened in July, 1891. This line is distinguished by not being State property. The production of

Liberian coffee, pepper, and tapioca is increasing in Sungei Ujong, while tin is worked mainly in Jelebu.

PAHANG.

In Pahang, progress is only beginning. The disturbances which occurred in that State in 1894 tended to delay its civilization. At present, it possesses no roads worthy of the name, but that between Kuala Kubu and Kuala Lipis is expected to be finished before long. Pahang has always had a high reputation for mineral wealth. In 1895, 15,099 ounces of gold, 1,065 piculs of tin, and 10,711 piculs of tin ore were exported. The only agricultural products were rice and rattans (rotan sega). The want of progress in mining and agriculture during the past eight years is attributed to the smallness of the Chinese population, and to the fact that most of the country was locked up in unworked concessions, which have lately been canceled.

THE FEDERATION.

The most important event common to all the protected native states is their federation in June, 1896. The weakest point in the political system of the states was the administration of the law. The law itself was shadowy, but it was administered by officers whose knowledge of it was more shadowy still. This did not matter much in the smaller states, but when civil cases, involving large sums of money, were decided in Selangor or Perak by gentlemen with no legal training and little legal knowledge, from whom the ultimate appeal lay to a gentleman similarly qualified, complaints began to be heard. Lawyers were refused an audience in the courts. Capitalists in the Straits, doubtful of the protection property could receive under such a system, refused to invest in the native states, and the mistaken policy of the government of the states undoubtedly diminished, or, rather, checked the growth of their credit. Under the federation, Mr. L. C. Jackson, Q. C., was appointed judicial commissioner of the whole of the federated states.

OPENING OF RIVERS IN CHINA.

On the 3d of June, 1897, the West River, or Si Kiang, as it is called in Chinese, was opened to foreign trade as far as Wuchow-fu, a city of some 50,000 or 60,000 inhabitants, situated just within the eastern border of Kwangsi province, 200 miles west of Canton, and at the junction of the Kwei Kiang, or Cassia River, with the West River. This city has been declared an open port, as well as has one other—Sam-shui, located about 40 miles west of Canton, where the West River is joined by the North River. Four other cities are made ports of call, two of them, Kongmoon and Komchuk, lying near the mouth of the river and commanding the trade of the islands situated there, which are among the most fertile and populous in all China.

On the evening of the 4th of June, the steamship *Wing Tong*, of the China Navigation Company (Messrs. Butterfield & Swire, agents), left Hongkong for Wuchow—the first steamer to disturb the primitive quiet of those regions. The distance from the mouth of the

river at Macao to Wuchow is probably 250 miles. The water is shallow and is said to be unsafe for vessels drawing more than 8 feet. The channel is as yet unsurveyed, and there are many rocks, but preparations are no doubt already made for placing the lights and buoys that will be needed.

The West River is the chief branch of the Pearl, or Canton, River, and with the remaining tributaries, the East and North rivers, forms one of the most important river systems of China, draining a territory of not less than 200,000 square miles.

The East and North rivers furnish water communications with a great part of the province of Kwantung, while the West River, with its many affluents, penetrates to every quarter of Kwangsi and to the eastern portion of Yunnan and the southern part of Kweichow. The principal stream is said to be navigable for 700 miles. At Wuchow-fu, as noted above, it is joined by the Cassia River, which communicates with Kweiling, or the Cassia Grove, the capital of the province. Still further up, the Hsiun Yung enters, at Hsiunchow, and 310 miles above Wuchow, at the important city of Nanning, the river loses its own name and divides again, the Tso Kiang coming from the southwest and the Yu Kiang from the northwest.

At present, Wuchow is the limit of steamer traffic, and the commissioner of customs at Lungchow has expressed the opinion that it will not be found practicable for steamers to ascend above Wuchow, owing to the numerous rapids and rocks. Native boats, however, ply regularly to Pehseh, on the borders of Yunnan, some 700 miles from the confluence of the West and Pearl rivers, and the smaller craft, indeed, ascend a hundred miles further.

The opening of this important artery of trade has been under discussion for some years past, and is the result of persistent application by the British authorities. It is hoped that it will result in developing a profitable trade with many parts of Kwangsi and the neighboring provinces, a region which has so far been all but untouched by foreign commerce. Heretofore, this natural channel of trade has been almost wholly closed by the prohibitive exactions of the numerous likin stations, of which there were, in 1890, no less than fifteen or sixteen between Canton and Nanning, a distance of about 510 miles. As a result, what little trade there was with the outside world was carried on by unnatural and circuitous routes, much coming from Hankow, some 1,200 miles distant, on the Upper Yangtse. In 1890, 95,000 taels' worth of goods were received at Kweiling by this route. In 1877, the port of Pakhoi, on the southwest coast of Kwantung, was opened. A large trade has since grown up with that port, from which goods are conveyed, a portion of the wav by water and the remainder, at a considerable cost, overland

to Nanning. Kwangsi itself has no coast line. From Nanning, the goods are distributed through western Kwangsi and eastern Yunnan. The trade of Pakhoi, in 1895, amounted to 3,813,063 taels ($3,050,450). As trade suffered in 1895, the figures for 1893 are fairer, *i. e.*, 4,275,707 taels ($3,420,565). Of this trade, the greater part must, perhaps, be credited to the region under survey. In 1889, Lungchow, in western Kwangsi, on the border of Tonkin, was opened as a result of French diplomacy, with the hope of diverting a part of the trade to French Indo-China.

To facilitate intercourse, the French provincial government began the construction of a railroad to the border. In 1895, this road was completed to Langson, within 13 miles of Nacham, from which place there is water communication with Lungchow, and last year, by convention with the Chinese Government, it was agreed to carry the road over the border into Kwangsi. So far, however, but a small part of the Kwangsi trade has taken this route. The ignorance of the French language and the dread of the tariff regulations of Tonkin are assigned as reasons for the reluctance of Chinese merchants to try the new route. It appears, too, that no considerable advantage was to be gained in the cost of transportation.

It may appear strange that, with a treaty provision existing since 1858 permitting the shipment of goods inland on transit passes by the payment of a small extra tax (2½ per cent) at the port of entry, the likin stations should have been able to so seriously interfere with the river traffic. Provincial officials in China, however, exercise great authority, and as they depended very largely upon the likin dues for the support of the local government, they could not consent to give way, even where the treaty demanded it, unless some compensation were offered. That this has been the chief obstacle to commerce is shown by the fact that when an arrangement was effected in 1891, by which the granting of transit passes was allowed, the sudden development of trade was startling. This was especially seen in the greatly increased imports of American flour and kerosene and foreign cotton goods. After a few months, the granting of passes was again forbidden, and trade immediately declined to insignificant dimensions until 1895, when the privilege was restored and the demand for foreign goods again assumed phenomenal proportions.

Kwangsi is one of the most sparsely populated provinces of China. It ranks next to Kansuh in this respect. It contains some 78,250 square miles and a population estimated in 1890 at 7,500,000. But a small proportion of the province is capable of cultivation, the country being rugged aud mountainous. It is not a wealthy province, but the people must not be considered as extremely poor. By the

devastation of the Taiping rebellion, which had its origin in this province, it was largely depopulated and many of its industries destroyed. The three provinces—Yunnan, Kwangsi, and Kweichow—lying together in the southwestern corner of China are alike in this respect—that they are rich in natural resources, inhabited largely by aboriginal tribes, and have been laid waste by rebellion (Yunnan by the Mohammedan rebellion in 1855–1873), from which they have not yet recovered. The mountains of Kwangsi are reported rich in minerals—gold, silver, copper, iron, and coal—while Kweichow, in addition to these, has the richest quicksilver deposits known to the world, and Yunnan furnishes copper and salt. As yet, however, the mines are but little worked. The other products of Kwangsi are rice, maize, sugar, cassia lignea, aniseed, aniseed oil, vegetable oil, and valuable timber. An attempt has been made recently to revive the silk industry, but without much success. Aniseed trees are cultivated and the oil drawn off by distillation, a trade which is steadily growing and which promises to attain very large proportions. In 1894, the trade in aniseed and aniseed oil amounted to $370,826.

I have already called attention to the demand for American flour and other products. This demand is on the increase, and with proper attention on the part of those interested, the opening of the West River and the use of transit passes beyond may be made to contribute very largely to the increase of American trade in southwest China.

T. R. JERNIGAN,
Consul-General.

SHANGHAI, *June 29, 1897.*

Minister Denby, in a report dated Peking, June 18, 1897, also informs the Department that the West River has been opened. In a communication of June 23, 1897, he says that, besides the opening of the two ports of Wuchow-fu and Sam-shui, the following places are ports of call: Kam Chuk, Kung Mun,* Shu-Hing, and Tak Hing. These last four are opened to trade, but not to residence, although there are some American missionaries residing at Shu-Hing.

Acting Vice-Consul Alf, in a report from Canton dated June 9, 1897, says that a number of Americans reside at Wuchow-fu, and there is at least one small American vessel intended for traffic on the river. He adds that the people are friendly, and that the utmost good will prevails.

*Spelled "Komchuk" and "Kongmoon" by Consul-General Jernigan, in the beginning of his report.

THE GREAT SALT WELLS AT TSZ-LIU-CHING.*

Tsz-Liu-Ching is a subdistrict of Fu-shun Hsien, China, and stands on both banks of a small river which runs into the Niu-fu Tu River at Tsen-chi K'ou, 5 li† below Teng-ching Kwan. It forms an equilateral triangle with Fu-shun and Niu-fu Tu, all three places being 90 li from each other. Teng-ching Kwan is a large market town (also under Fu-shun Hsien), where transshipments of salt from the smaller into the larger junks take place.

Judging from the appearance of the straggling villages and markets which together make up what is called Tsz-Liu-Ching, and judging from the number of wells, which, working or not, are estimated at no less than five thousand (though they are officially reported at 1,200), I should put down the population at 250,000 at the very least. The area which I saw covered with boiling sheds and well apparatus was certainly 4 square miles, and I saw by no means the whole. Besides, there is a large chai-tsz, or fortified retreat, upon a hill, built by a local magnate at the time of the Shih Ta-k'ai (Taiping) rebellion, which is thickly inhabited, and beyond which there are other wells.

The majority of the wells are from 2,000 to 3,000 feet deep, and they all seem to be bored upon the same principle. A few much shallower wells do not yield plentiful supplies of brine. The fact of some wells having water and others only brine, or only gas, seems to require more explanation than has been given by former travelers. According to my understanding of the accounts locally given, the quality of the brine has nothing to do with the gas, and gas may suddenly make its appearance from a well which never had any before, or where the supply had ceased, or it may suddenly cease after coming up freely for years. As to the wells "which have gas, but no brine," this simply means that, on first striking the brine, the gas generally rushes up with such force as to make it impossible for some time to put anything down the well. Though the mouth is not more than 6 inches in diameter, the force of the rising hydrogen (for such a very old European resident in Sze-chuen assures me it really is), is sufficient to cut a man's head or limbs clean off or to drive an iron pan weighing over a ton high up in the air. This gas, therefore, has first to be consumed, and to a great extent exhausted; and this is done by boring small holes in the sides of the well near the surface, and joining to these holes underground bamboo tubes, which,

* From a narrative by E. H. Parker.
† 1 li=2,115 feet.

again, can be subdivided to any degree. The mouth of the well is then covered, and the gas distributes its force over these tubes, the other ends of which are conducted to a safe place and ignited, until the force of the up-rushing gas is reduced. I saw one well in this condition. The gas was carried along two main pipes, strongly covered with clay, into two sets of a score or so of smaller jets, each of which had been burning night and day for a long period, and each of which when its power should have been reduced would still be able to supply perpetual fire for several pans. The waste seems enormous. Some wells have more fire than their proprietors can use, and the gas is sold to neighboring wells. These jets I saw were let out at a yearly rental for each jet of between 40 and 50 taels; and as there were seventy pans in the establishment, the owner of the fire gas would make a handsome sum out of that alone. It is only the fiercest jets of fire that are sufficient to boil the hard pan salt, or kwo-pa; the jets of ordinary vigor are employed in boiling the shui-kwa, or granular salt. Although the gas, when in use, burns with a flame sufficient to evaporate in one day enough brine to make a 600-pound lump of salt in a 3-inch thick pan, it is when extinguished, easily kept down with a small stone placed over the jet. The row of jets are extinguished "negatively"—that is, gas is allowed to escape into the air through two funnels built in the conduit outside the boiling shed. These funnels, when the jets are burning, are stoppered with a pair of simple paving stones. The furnace over which each pan is placed is a hole about 5 feet in diameter by 6 feet in depth. In the large sheds, there are two rows of pans, thirty-five in each row, and the two gas conduits, joining outside into one, lead underneath the pans. The hole by which the gas is admitted into the jet is not more, I think, than half an inch in diameter. The brine trickles slowly and perpetually into the pans from large wooden reservoirs, covered with clay, resembling huge pipes of wine. There are about half a dozen pans to each reservoir, and the brine enters the reservoir at the top along a conduit leading from the well. The bamboo half pipes which conduct the trickling brine from a hole or tap in the side of the cask or reservoir to each pan are movable, so that the supply can be checked at any moment. One man appears to look after each cask and its pans. The wages are high, six to seven strings of cash—say £2 ($9.73)—a month, and food found. The day's work is twenty-four hours, and each workman rests and works on alternate days. One pan is not quite able to produce a pao, or panful a day. To take one boiler as an instance, seventy pans produced 50 pao a day. A pao of granular salt is 220 catties (293 pounds), so that about 11,000 catties, or, say, 7 tons a day, would be the production of the place. The salt, when turned into hampers,

bites and coheres, is sawn into four triangular portions, two of which form the load of each of the numerous coolies we met between Pih-shan and Tsz-Liu-Ching.

The brine is not all of the same quality; the term hant'ou or "degree of quality" is used to distinguish. The blackest brine is the best and the yellowest the worst. Twenty per cent or more of salt is got from the best and 10 per cent or less from the worst. The price of the brine varies from 1 to 3 mace the load of about 200 catties (266 pounds). At one boiler, I was told that twelve loads of brine were required to produce 240 catties (320 pounds) of hwa salt. This would leave (at the rate of 2 mace, or 300 cash, a load of brine) about 700 cash profit on each pan per diem, out of which the pay of the man, the cost of hiring the fire jet, and the wear and tear must be deducted. The boilers sell (under the present system to the Government) by the pao; but 50 pao make the warrant or yin, which is the unit usually used in the junk-carrying trade.

The pan salt is evaporated until it becomes as hard as stone and each pan turns out a cake weighing over 500 catties (666 pounds); this is split into four quarters, and each quarter, with some fragments added, forms a pao, or 160 catties of pan salt, such as I saw on the Sung-k'an River. I could not find out exactly how long it took to make a cake of pan salt; indeed, it was most difficult to extract precise information from anybody. Apparently, about half the total production of Tsz-Liu-Ching is pan and half granular salt.

Between each row of pans or furnaces, runs a lane, level with the jets, and 6 feet below the ordinary ground, *i. e.*, the "floor," for the ground and the floor are convertible terms in China. The heat from the furnaces is, of course, very great, and in summer must be nearly insufferable. The roof, however, is high and built overlapping, so as to well ventilate the place. I did not notice much smell from the burning gas, but the fresh brine and the unburnt gas both smelt to me like a mixture of rotten eggs and coal gas. The brine, in the process of boiling, out of total solid matter produced, gives one-half of tan-pa, or gall cake, and one-half of sweet salt. I did not see the gall cake until I had quitted the town; but I suspect that it is the same thing as the scum which forms on the top of the boiling brine, and the secretion of which is facilitated by pouring in about half a gallon a day of tou chiang or tou-hwa (the curd and whey of beans unseparated). On the other hand, I was distinctly told at the wells that the scum was boiled again, and yielded a fair proportion of salt, whereas the gall cake is acrid and uneatable. It is sold at the wells at 6 cash a catty (1⅓ pounds), and is used to separate the curd from the whey of bean juice, to "bind" plaster and paint, etc.

The wells are very interesting. A pair of immense shears, patched, shored up, and steadied by stays and guys, stand over the well mouth. At the top of the shears is a wheel or pulley, from which decends the bamboo rope which supports the bucket. The bucket is a bamboo almost as high as the shears. It is strengthened by having hempen cords wound round convolutions cut round its skin, and has iron rings at the two ends. The bamboo of the bucket is pared off and cut into four prongs, in order, I suppose, to protect the valve and present a small surface in descending; also, perhaps, to facilitate picking up in case of accident. The valve is a strong piece of skin, opening inward, and can just be felt by a finger thrust up between any one of the prongs. When the bucket is raised, a man lifts up the valve, not with his finger (which would be difficult, if not impossible), but with a sort of scoop or trowel fitting round the bamboo and having on its inner surface a nail or spike for the purpose of running between the prongs. Even with this instrument, the lifting requires an effort, for there are 250 pounds of water, in a tube not thicker than a brandy bottle, pressing upon the valve. The end of the bucket is veered over a tub in the ground hard by, which leads through a conduit and through a rough filter to a large pit or reservoir kept under lock and key. Here the water is sold, and from here conducted to the boilers by conduits, most of which work upon the simple difference of level; for the place is very hilly. I did not see any of the other brine-raising wheels described by Captain Gill, but they are evidently built on the same principle as the irrigating wheel of Nan-ch'uan. The rope which ascends to and goes over the wheel which I saw descends at a double angle of about 15 degrees to the under face of another wheel about 6 feet in diameter, having a hollow iron tire. From this the rope runs horizontally, always in the same direction, to the circumference of a decagonal wheel sunk in the ground. This wheel is built exactly on the principle of a teetotum. One end of the axle (a broad beam with iron-covered ends), sinks a foot deep into an iron socket, and the other end runs up into a similar socket let into a huge beam made fast to the building. From the axle extend several score of spokes, one above the other, but not so far as to be in a line with each other, and perpendicular posts run up from the outer end of these spokes to a number of large spokes at top and bottom which complete the teetotum, and, of course, join to the axle. The depth of each well is easilly ascertained by counting the number of times the rope goes round the teetotum, taking the diameter and multiplying by three. An arrangement of bars, tied together at each two or three alternate spokes, permits of a buffalo being harnessed by a rope trace to a protruding pole, and four buffaloes are required

to each teetotum. Each buffalo has a driver, who belabors the wretched animal with a piece of rope held in one hand and clings to his tail by the other. The buffalo has also a cord halter running through his nostril, and so tied to the wheel that he gets a tweak if he lags behind. At first, the animals walk at a brisk pace round and round, but, as the work progresses, they are urged to a trot, and it is really a painful sight to see the great, patient brutes panting and puffing, laboring and straining with the exertion. It takes about twelve minutes to haul a bucket up 2,500 feet, and a series of skin tongues and straw markers distributed over the last hundred yards of rope, as on a log line, give the necessary warning to the drivers, who then slip two of the buffaloes and finish up with the remaining pair. The emptying of the bucket only requires a few seconds. Fresh buffaloes are harnessed to every second turn; and so the work goes on.

The huge teetotum wheel, of course, revolves with terrific speed and force as the bucket gains impetus in its descent, but a brake, in the shape of flat bamboos gradually tapering into a rope at the two ends, is made fast to the walls or any other secure place, while the flat part runs half or three-fourths round the wheel. When there are only a few coils left, a coolie in charge sits on or presses this brake, which at once checks and soon stops the wheel. I inquired and was told the wheel never caught fire. Each set of buffaloes haul up two buckets in succession, and are harnessed four or five times during the twenty-four hours. Once a day, the animals are taken to the river, where they take their pleasure after the day's work. The buffaloes are beautifully clean. They are well fed on broad beans and straw or grass, and cost between 300 and 400 cash a day to feed. A robust young buffalo is worth between 30 and 40 taels; between the ages of 7 and 10 years, from 7 to 20 taels. They never breed in the well establishments. Their refuse is carefully collected and mixed with straw, and sells for 4 cash a cake of about 2 catties (2.66 pounds). These cakes hang about the sheds and houses, line the highways, and are generally ubiquitous.

The bamboo lines which haul up the bucket are twisted like hemp ropes, and spliced with strong hide thongs. When they break, the bucket or line is fished for with a grapnel, of which numbers are kept of every imaginable size and shape, so as to lose no chance of catching the lost bucket. If it can not be caught, there is nothing for it but to hammer it away in pieces, like the rock through which the well is bored. A steel or iron hammer, with a long, bulbous top ingeniously fitted into a split bamboo, the ends of which are then tied round its thin end, is suspended like the bucket, except that in this case the bamboo rope is simply a succession of flat strips,

which, probably, as in the case of the brake, withstand jerks better than twisted cord. I was present when one of these hammers was hauled up; it had been considerably blunted, and was at once taken away to be repaired. The end is like a closed fist, with two short horns. A short bucket was then sent down to bring up the débris. I understood the man to say that this well had been boring for seventy years, at the rate of 2 inches a day. But there is no uniformity in the time taken to bore through.

Just below the surface and extending 300 feet down, there is a cedar-wood lining, the object of which is to prevent the yang shui, or positive water, or earth water, which percolates through the earth, from descending the well and mixing with the yin shui, or "negative water," or water from the nether regions, *i. e.*, the brine. The top of the well is always covered with a stone or flag; and, moreover, there is an open interval below the flag top, extending a few feet lower, through which the gas is conducted horizontally; so that this cedar-wood lining is not often visible. The largest well employs one hundred and fifty buffaloes, and the smallest boiler has but two or three pans. The boiler is obliged to return the iron, or, as he puts it, "he buys the pan only, not the iron," for 40 taels; some said 25 taels, but perhaps different thicknesses are required for different kinds of salt.

Kung Tsing is a subdistrict of the magistracy of Yung Hsien, and is 5 miles from Tsz-Liu-Ching. Its production is unimportant as compared with that of the latter, and, besides, there is no gas; coal has to be burnt. The supply of brine at Tsz-Liu-Ching is apparently inexhaustible (though individual wells occasionally dry up) and it is not very clear why part of the Kung Tsing brine is brought down to Tsz-Liu-Ching, at enormous expense, for evaporation. The only explanation I could get was quite a Chinese one—that the district had to consume a certain quantity of brine every year, in order that the Government might collect the fixed tax upon it. The brine is not brought down in boats, for the river is obstructed with rocks and quite unnavigable just above and beyond Tsz-Liu-Ching, but is carried down along numerous bamboo conduits, the erection of which has cost £3,000 ($14,599) apiece. Pan salt from Kung Tsing is brought down to Tsz-Liu-Ching on mules and horses, and then shipped by boats. The dams of which Captain Gill speaks are lower down the river, and answer the purpose of our locks. Three of them are of stone, and a larger number of wood, like those in the Saône, at Lyons. These are kept shut in order to allow the water to collect, and every five days a fleet of junks, from fifty to a hundred or more, start from Tsz-Liu-Ching in order to pass the weirs (yen) at the same time, and thus economize the water. I happened to arrive at the Yen

T'an or Yuan T'an (45 li from Tsz-Liu-Ching), on my way back, just at the moment that the dam at that point was opened. A hundred junks or so were lying in the river above the dam, the level of which was about a foot above the river below. The river and dam were some 100 yards across, and the flood gate consisted of one or two logs, which were lifted by a single coolie. The water rushed down and the junks went with it, one after the other, in Indian file, or, as the Chinese say, "as the geese fly." These junks are hideous, flat-bottomed boats, each carrying about 18 tons of salt, and not drawing more than a foot or so of water, if that; even then they require lighters to take part of their cargoes through the flood gate. The freight from Tsz-Liu-Ching to Teng-ching Kwan (only 100 li or so) is 70,000 cash the cargo of 450 packages of granular salt. The well catty is a sort of baker's dozen—that is, 10 catties are really 12; so that 450 times 220 catties, or, say, 75 tons of salt, are carried for $60—a very high freight. But the quickest passage occupies five days, and sometimes a fleet of junks have to wait weeks for water; so that, after all, the freight is not excessive. The freight from Teng-ching Kwan to Lu Chou (the center of the Government salt trade), on the Great River, is 120 to 200 cash the package for granular salt and about 25 per cent less for pan salt. A cargo of pan salt is distributed over four well junks, and the weight of each cargo is 12 yin of 50 pao,* each pao weighing 167 catties gross, or 160½ net, delivered at Chungking; so that in each case the cargo is the same, namely, about 100,000 catties (133,300 pounds). The largest Great River junks can not carry more than one cargo of salt.

The real profits made by the boilers, they are, of course, not likely to disclose; however, one of them informed me that he considered himself lucky if he made a clear 5 taels the yin, or, say, 1 cash a pound. He turned out over 300 yin a year. Fifteen hundred taels a year would be a large Chinese fortune, but it must be remembered that these boiling houses are large, family, vested interests, the estimates of which are matters for cyclic rather than annual calculation. According to him, the wells of Tsz-Liu-Ching were known to K'ung Ming two thousand years ago. The two principal families now interested are the Li and Wang, who own a great many wells and boilers. The Wang in whose establishment I was, had 40 pans, which produced about 20 yin a month. Half his pans were for pan salt and half for granular. He said he sold his pan salt to the Government at from 90 to 100 taels the yin. This is about one-fourth

* In a previous paragraph, the consul gives the weight of a pao of granular salt at 220 catties (293 pounds). It would thus appear that the pao of "granular salt" is 293 pounds, while the pao of "pan salt" is only 167 catties (223 pounds).

of the price of the same salt we saw selling at Wu-ch'uan, in Kwei-chow province.

OIL WELLS VISITED BY CONSUL SMITHERS.

The oil wells which I saw in the neighborhood of the salt wells at Tsz-Liu-Ching are worked on the same principle as the latter, both as to boring and raising the substance below. There are between four and eight of these wells. The oil, as far as I could determine, contains a percentage of petroleum, as the smell in and about the place clearly indicated. The oil goes through no refining process, but is used for lighting as it comes up from the well, after being allowed to stand in reservoirs to permit the foreign substance to settle. The oil is then skimmed off and put into tubs containing 80 catties and sold for about 60 cash the catty. A catty is equal to 1⅓ pounds. Not more than 20 per cent of the total matter brought up from these wells is oil; the balance is brine and water. The diameter of the wells is about 3½ feet, and it takes from sixteen to twenty years to bore to a depth of 3,000 feet. At times, only a few inches can be bored during one day, at others 3 feet or more, according to the hardness of the rock. If machinery were employed in boring these wells as well as in raising the substance below, it would greatly lessen the labor and time employed, and at the same time immensely increase the output. The trouble is, the well owners have not the ready money to invest in this way. The profits, after all expenses are deducted, are not large, and manual labor is the cheapest, although not the best, they can employ. Labor-saving machinery in China, in my opinion, would be out of place, as the problem is to supply labor for all, especially in times like these, when famines are frequent and rice commands a figure which only the well to do can afford to pay. If any machinery is needed it is for refining the oil, which is used for lighting in its crude state.

GEO. F. SMITHERS,

CHUNGKING, *June 24, 1897.* *Consul.*

COTTON IMPORTS OF JAPAN IN 1896.

I have received a statement of the cotton imports of Japan for 1896, and, having converted the weights, as therein given, into pounds, have now the honor to submit the same in order that it may be communicated to those interested in the trade in the United States. It should be observed that though the imports from that country exceeded those from any other except British India, they fell short of the latter by 112,983,025 pounds. I ascribe this fact to excess in

production of inferior goods [in Japan], which do not require the use of long staple.

Cotton imports in 1896.

Imported from—	Raw cotton.		Cotton on the seeds.	
	Quantity.	Value.	Quantity.	Value.
	Pounds.	*Yen.**	*Pounds.*	*Yen.**
United States	24,938,544	4,252,398.26		
French Indo-China	1,786,564	242,143.67	2,950,356	133,197.44
British India	137,921,569	19,244,840.41	17,013	1,020.80
China	58,229,180	8,158,084.92	7,928,516	301,224.47
Korea	4,153	509.50	54,660	1,714.10
Siam	115,536	17,277.40	632,185	29,919.51
Other countries	828,457	191,021.71		
Total	223,824,004	32,106,275.87	11,582,730	467,076.32
Import, month of December, 1896	14,365,412	2,206,252.94	275,238	11,279.50

* The value of the silver yen January 1, 1897, was 51.1 cents.

E. SPENCER PRATT,
Consul-General.

SINGAPORE, *June 8, 1897.*

AMERICAN HORSES IN DENMARK.

The American horse appears to be gradually finding a market in one after the other of the European countries. In January of this year, a dealer imported, as an experiment, about 15 draft horses. They were easily sold at prices varying from $150 to $350, one fine pair of chestnuts bringing $900. A second shipment of 20 horses is now being advertised, and I am informed the horses are selling readily at $147 to $230. These are also draft horses. It does not appear that any saddle horses have yet been offered for sale as such, though some 4 or 5 of the first lot mentioned above have since been broken to the saddle.

American horses for this market should not be under 15 hands in height and should be adapted for draft, unless otherwise ordered. Denmark imports annually from 5,000 to 6,000 horses, mostly from Russia and Finland, ranging from 12½ to 14 hands. They are much in demand by bakers, milkmen, truckmen, and others, whose business requires light, active horses and light vehicles.

Work horses, omnibus, car, and cab horses are almost exclusively of domestic origin. For this class of work and for heavy draft gen erally there is probably no better animal than the Jutland horse—a heavy, powerful beast. For victorias, landaus, and carriages, German horses are mostly used, there being also some Jutland horses.

Saddle horses vary according to individual taste, English, German, and Swedish predominating.

Denmark annually exports from 12,000 to 15,000 horses of her own raising to the Continent, many of them finding their way to France, where they are used as cab horses. In 1896, there were imported 6,115 horses, valued at $491,646, or about $80 per head; there were exported, for the same period, 15,959 horses, valued at $2,738,564, or about $172 per head. That the native Danish horse is a fine animal and commands good prices, these figures prove beyond a question.

Hamburg would, of course, be the port of entry in shipping horses to Denmark. No papers are necessary for landing horses in Denmark beyond the health certificate of a veterinary surgeon at the port of shipment, properly attested by a Danish consul. They are admitted free of duty.

I have recently had occasion to correspond with the recruiting officers of the Danish army as to the adaptability of the American-bred horse for use in the army. The officer in charge of this branch of the service replies that he has not seen sufficient American horses to form a decided opinion, but he is under the impression, from what he has seen, that they are better suited for draft than for cavalry horses. Draft horses for the army are recruited exclusively in Denmark, and it is safe to say they always will be. Cavalry horses, on the contrary, are bought principally in Germany, and latterly, also, in England.

Some of the necessary qualifications of horses destined for the cavalry are as follows: They must be blooded mares or geldings, suitable in build and figure for cavalry, well gaited, kind in disposition, and strong in limb. Dapple grays and yellow and horses with prominent marks (blaze face, wall-eye, etc.) are never accepted. The recruiting commission buys horses as a rule twice a year—in the fall and spring. In the fall, the age of the horse must be 4½ to 6 years, and in the spring 5 to 7 years. They must measure from 15 to 15½ hands in height if they have not completed their sixth year. After that age, they must be 15¾ to 16 hands high.

Prices vary according to quality and market conditions. The last English and Irish horses were bought at an average price of £37 to £38 ($180 to $185), delivered in Parkestone. For other horses the prices at present are: For officers' horses, 830 kroners ($221.40), and for the ordinary cavalry horse, 760 kroners ($203.68), at the place of purchase. The purchases do not exceed 150 animals per year. Horses are bought only after the inspection of the commission, one of whom is a veterinary surgeon.

American dealers who desire to offer cavalry horses to the recruiting commission would probably find it more convenient to do so through dealers in England, Ireland, or Germany when the commis-

sion makes its semiannual visits to these countries. The address of the recruiting commission is "Formand for Remontekommissionen, 12 Stormgade, Copenhagen." If, at the time of these visits of the commission, any local dealer should be prepared to offer for inspection American horses answering in qualifications to the outlines given above, I am sure the commission would buy such horses as readily as the German or English horses. At least one of the commission, as I am informed, is very favorably impressed with the American horse for cavalry. I give below the names and addresses of some of the best-known horse dealers in Copenhagen for the benefit of those exporters who desire to try this market. The commercial ratings of any of these firms can be obtained by writing to P. V. Fornais's International Bureau, 16 Gl. Torv, Copenhagen. The dealers are: H. P. Bekker, Baldersgade 6; F. A. Benthein, Petersens Passage 9 B; I. Bröndum, Petersen's Passage 16 A; P. C. Gjertsen, Viktoriagade 6; I. Hansen, Gasvarksvri 33; C. C. Hecht, Vesterbrogade 9; N. Henriksen, N. Farimagsgade 39; N. Jörgensen, Gasvarksvri 14; J. Jörgensen, Falkonerallen 12; F. H. Möinichen, Vesterbrogade 12; H. P. Rasmussen, Vesterbrogade 35.

ROBERT J. KIRK,

COPENHAGEN, *September 15, 1897.* *Consul.*

FINANCIAL CONDITION OF CHINA.

There has recently appeared in the miscellaneous series of the British Foreign Office publications an instructive report by the British consul at Shanghai on the "Revenue and expenditure of the Chinese Empire." This report is the most comprehensive essay on the finances of this country that has yet been published. The changed conditions since the war, which have made China a borrower of money from abroad and which have led her to make an appeal to the treaty powers for an increase of import duties on foreign goods, have directed attention to the taxable resources of the Empire. To the study of this subject, the report of Consul Jamieson will be found an opportune contribution.

The chief source to which Mr. Jamieson has had recourse for his statistics is the Peking Gazette. From the pages of this publication, he has laboriously translated reports of receipts and expenditures made to the Throne in a disconnected and fragmentary way by the provincial authorities. In some cases, detailed returns are thus made as to particular departments of the revenue; in others, such information is afforded as to enable more or less accurate estimates to be made regarding items not reported on in detail. Mr. Jamieson says that, while these reports do not represent the sums extracted from the

people, they do describe the sums available to the Imperial Government. Estimates are made as to what sums under the head of certain taxes are actually collected by the officials, and a comparison is made between these estimates and the published returns in order to show that the Central Government receives but a fraction of what the people pay.

A perusal of this paper leads to the conviction that China would have ample security for great foreign loans if her taxes could be properly collected. It also leaves upon the mind the impression that it would have been wise for China to supply her financial necessities by some reorganization of her internal taxation, rather than to have made an appeal to foreign powers to come to her assistance by permitting her to remodel the tariff on the basis of the rate of exchange of several decades ago.

Mr. Jamieson treats his subject under two heads—first, the revenue at the disposal of the Imperial Government; second, the total revenue of the Empire.

The revenue at the disposal of the Imperial Government is derived from four separate forms of taxation, the first of which considered is the "tribute rice." This contribution to the needs of the Government consists of about 2,090,000 cwts. of rice, sent annually from the provinces of Kiangsu and Chekiang to Peking, where it is stored in Government granaries and paid to officials and soldiery as part of their monthly stipend. The value of this rice annually approximates 5,000,000 taels, but the method of its transportation is so badly organized and is subject to such charges en route, that it is estimated that the Government would save 1,000,000 taels* ($731,000) annually by abolishing the system prevailing for its shipment to Peking. Any foreign steamship company would carry it at one-fourth the present cost, but Mr. Jamieson states that "there are too many officials interested in the existing state of affairs to admit throwing it open to public competition."

The second item in the revenue available for the Government is the "Peking quota of silver," raised in the provinces from the land tax, salt duties, foreign customs, native customs, and likin—in all, 7,000,000 taels per annum. The third item consists of supplementary contributions from the provinces for "Peking extras" and the expenses of the imperial household, realizing 7,438,000 teals ($5,437,178). These three items produce an aggregate sum of 19,478,000 taels ($14,138,418), which is used to pay the troops at the capital and the cost of the civil administration.

* It is assumed that haikwan taels are meant. The value of the haikwan tael on July 1, 1897, was 73.1 cents, United States currency, and the reductions in this report are made on this valuation.—*Bureau of Foreign Commerce.*

In addition to the above items, the foreign customs yield about 22,000,000 taels ($16,082,000) per annum, of which, by imperial decree, two-fifths are paid annually into the board of revenue at Peking and appropriated directly by the Peking Government, while three-fifths are applied to the coast-defense fund, interest on foreign loans, the admiralty, the diplomatic service, etc.

The revenues of the Central Government for its own uses would thus seem, according to Mr. Jamieson's statement, to be as follows:

Description.	Revenue.	
	Taels.	
Tribute rice	5,040,000	$3,684,240
Peking quota in silver	7,000,000	5,117,000
Peking extras	7,438,000	5,437,178
Two-fifths of imperial maritime customs revenue	5,866,000	4,288,046
Total	25,344,000	18,526,464

It must be remembered that this sum is exclusive of all sums raised for administrative expenses, public works, military and naval charges, etc., in the provinces.

In matters of taxation, the provinces are quasi independent. Every year, the board of revenue makes out a statement of what is needed for imperial purposes and apportions the sum among the provinces. Each province furnishes its quota, retaining for its own purposes all collections made over and above this quota. The amount remitted to Peking is small compared with the sums collected and spent within the provinces themselves. This will fully appear from a consideration of the second division of the subject.

THE GENERAL REVENUE AND EXPENDITURE OF CHINA.

The sources of revenue of the Chinese Empire at large may be thus stated: (1) The land tax payable in silver, (2) the land tax payable in grain or commuted, (3) the salt tax, (4) taxes on merchandise in transit, (5) the maritime customs (foreign), (6) the native custom-houses, (7) duties on opium, (8) miscellaneous, including land transfer fees, licenses to pawnbrokers and others, duties on cattle and live stock, sale of titles and official rank, donations, and fines from officials.

Taking up these items in their order, we find that the average yield of the land tax for 1892–1894 was 25,088,000 taels ($18,339,328). This is the amount actually accounted for and not the amount actually collected from the people. To ascertain what the people pay, there must be added to this the cost of collection and remittance, fees, charges, etc., amounting to at least 100 per cent additional.

The great defect of the land tax, as at present collected, is the system by which every magistrate and every collector is practically a farmer of the revenue. He is called upon to produce his quota and all over and above this sum that he can collect, he retains as his own. Mr. Jamieson makes the interesting calculation that if only 650,000 square miles of the 1,800,000 square miles of China were cultivable and paid the annual tax which is supposed to be paid, viz, three-fourths of a tael (54.8 cents) per acre, the revenue from this source would be 300,000,000 taels ($219,300,000). If this area, by reason of rebellion, drought, or famine, were reduced by one-third, and if the tax were only one-third of what it purports to be, the revenue would still be 70,000,000 taels per annum, or nearly three times as much as is actually reported as collected. Mr. Jamieson points out that the land tax of India, with which country China compares favorably in population, in area, and in fertility, produces the equivalent of 100,000,000 taels ($73,100,000) per annum.

The second source of revenue to be considered is the tax paid in grain, estimated at 5,040,000 taels ($3,684,240) per annum. The amount of grain actually taken from the people to realize this sum is estimated to be worth 6,562,000 taels ($4,796,822).

The salt monopoly, the most intricate and interesting feature of China's fiscal system, produces 13,659,000 taels ($9,984,729) a year. Here, again, a comparison can be made with India. The salt tax of that country produces the equivalent of 33,000,000 taels ($24,123,000) annually, while China produces 13,659,000 taels only. Estimating the annual consumption of salt in China at 25,000,000 piculs (1,666,625 tons) per annum and deducting the cost of production from the price the people pay for it, there remains the sum of 54,700,000 taels ($39,985,700), of which, as above stated, less than 14,000,000 taels finds its way into the Government treasury.

The receipts from likin on merchandise in transit are put at 12,952,000 taels ($9,467,912). The methods of collecting this tax have so often been discussed that the subject needs no detailed consideration here.

The imperial maritime customs yielded, in 1893, 21,989,300 taels ($16,074,178), and this may be regarded as about normal. It may be safely said that this is the only item of China's revenue uncontaminated by maladministration.

The native customs produce 1,000,000 taels ($731,000) per annum, which is characterized as "ridiculously small." The taxes on opium yield 2,229,000 taels ($1,629,399) out of the 15,000,000 to 18,000,000 taels which Mr. Jamieson thinks should be derived therefrom, and the miscellaneous sources above mentioned are credited with 5,500,000 taels ($4,020,500).

The revenue from all sources may be tabulated as follows:

Description.	Revenue.	
	Taels.	
Land tax	25,088,000	$18,339,328
Grain tax	6,562,000	4,796,822
Salt tax	13,659,000	9,984,729
Likin	12,952,000	9,467,912
Foreign customs (1893)	21,989,000	16,073,959
Native customs	1,000,000	731,000
Duty on native opium	2,229,000	1,629,399
Miscellaneous	5,500,000	4,020,500
Total	88,979,000	65,043,649

It is interesting to compare this summary with one made some years ago by Herr von Brandt, formerly German minister at Peking, and which is quoted in a recent work by Mr. Chirol, a correspondent of the London Times.* This summary is as follows:

Description.	Revenue.	
	Taels.	
Land tax	35,000,000	$25,585,000
Maritime customs	23,000,000	16,813,000
Inland transit dues	12,000,000	8,772,000
Native customs	10,000,000	7,310,000
Salt monopoly	10,000,000	7,310,000
Sale of titles and brevet ranks	5,000,000	3,655,000
Rice tribute	3,000,000	2,193,000
Licenses, etc	2,000,000	1,462,000
Total	100,000,000	73,100,000

These two estimates sufficiently approximate one another to be mutually confirmatory. The discrepancy of 11,000,000 taels between them arises from Mr. von Brandt's exaggerated allowance for land tax and native customs duties.

To the sources of revenue given by Mr. Jamieson, others of a less uniform and definite kind may be added. The high officials of the Empire are known to receive large sums from merchants, public companies, and subordinate officials, parts of which are retained by them as their own perquisites, but the majority of which are certainly spent for public purposes. For instance, the China Merchants Steam Navigation Company and the telegraph administration are known to be large annual contributors to certain educational institutions and to other public works at Tientsin. Though no estimate can be made of the amount of such contributions, they materially add to the revenue of the State. Moreover, the Tientsin Railroad, which

*The Far Eastern Question, p. 97.

appears in Mr. Jamieson's report on the expenditure side of the account, has now begun to be a source of revenue.

EXPENDITURE.

Mr. Jamieson opens his account of the expenditure of China with an apology for its baldness and meagerness of detail. Certain items only are susceptible of exact determination, and no statement of expenses is prepared by the Government. An attempt, under certain heads, is made by Mr. Jamieson to strike a balance, as follows:

Description.	Expenditure.	
	Taels.	
Metropolitan administration, Manchu garrisons, and imperial household	19,478,009	$14,238,418
Board of admiralty (northern squadron)	5,000,000	3,655,000
Southern naval squadrons	5,000,000	3,655,000
Forts, guns, and coast defense	8,000,000	5,848,000
Defense of Manchuria	1,848,000	1,350,888
Kansu and central Asia	4,800,000	3,508,800
Aids to Yunnan and Kweichow	1,655,000	1,209,805
Interest and repayment installments on loans	2,500,000	1,827,500
Railway construction	500,000	365,500
Public works (Yellow River embankments, sea wall, etc.)	1,500,000	1,126,500
Customs administration, light-house, etc	2,478,000	1,811,418
General administration of the eighteen provinces, including cost of provincial armies	36,228,000	26,482,668
Total	*88,979,000	65,079,497

*The error of 2,000 taels in this addition is doubtless due to a typographical error in the printed report. It can not be traced.

The accuracy displayed in this table is entirely fictitious, and the figures are largely the result of guesswork. If, however, we assume that they are approximately correct, the revenues of China would seem to have been about equal to her needs in times of peace, notwithstanding her defective financial system. But it will be noticed that no account is taken in Mr. Jamieson's table of China's recent war indebtedness.

At the close of the war, China had a debt of about £12,000,000 ($58,398,000), part of which antedated the war and part of which was contracted during hostilities, and she concluded the peace negotiations with a further debt of 230,000,000 taels ($168,130,000) to Japan. To meet this debt, she has already contracted two foreign loans of 100,000,000 taels ($73,100,000) each, and is now negotiating for another of like amount. To provide for even the interest on these sums is beyond the scope of China's present income. How to increase her revenue is the problem with which she is now confronted.

Two ways present themselves—the first, a reorganization of internal taxation, shown in this review to be ample for all purposes, if

properly administered; the second, an appeal for help to foreign powers. This latter course is a confession of weakness. It is ominous that the statesmen of the Empire have first turned to this plan. The indorsement by Russia of the first Chinese loan was utterly unnecessary. Its effect was to make Russia the arbiter of the destinies of China. Russia, being China's creditor, claims the right to intervene in all her domestic concerns and to dictate her policy. The history of Egypt may be repeated. China was only slightly indebted, her credit was good, the amount to be raised was comparatively small, and the security was ample; nevertheless, she became the bondman of her powerful neighbor.

CHARLES DENBY,
Minister.

PEKING, *July 8, 1897.*

SUEZ CANAL TRAFFIC.

I send herewith a statement from Consular Agent Broadbent, dated Port Said, July 19, 1897, showing the number of ships, with net tonnage and traffic receipts, which have passed through the Suez Canal during the first six months of 1897:

Nationality.	Number of ships.	Net tonnage.	Traffic receipts.
British	908	2,765,657.62	$5,024,957
French	101	254,915.46	485,367
Dutch	106	194,506.10	364,797
German	161	425,456.41	771,060
Italian	39	66,114.23	132,110
Norwegian	28	46,700.94	84,159
Russian	19	61,854.52	141,480
Austrian	37	89,764.92	160,557
Spanish	27	80,129.46	158,875
Japanese	18	46,101.88	84,507
Chinese	2	2,597.11	4,692
Ottoman	4	4,479.95	11,909
Egyptian	3	3,401.27	7,057
Siamese	1	1,279.99	2,382
United States	1	683.56	1,230
Danish	2	1,043.97	1,880
Mexican	1	551.28	956
Total	1,458	4,045,238.67	7,437,975

ETHELBERT WATTS,
Vice-Consul-General.

CAIRO, *July 26, 1897.*

DATE INDUSTRY IN PERSIA.

One of the most interesting, profitable, and growing industries in Persia is date farming. The date palm is indigenous in the south, and its cultivation is confined to a tract running parallel to the Persian Gulf from the borders of Beloochistan on the east to the Disful River on the west, and extending about 150 miles into the interior. Palm groves, however, by no means absorb the whole of this area. They are chiefly confined to sheltered valleys and plains exposed to a high temperature in the summer and having a very mild climate in winter. The palm requires a great degree of heat for the ripening and perfection of its fruit, and is, consequently, considering the size of the trunk, extremely sensitive to cold. This arises chiefly from the fact that the vital portion, or that which is most easily affected by outward influences, is the crown or head of the tree. If this be severed or frost-bitten, decay immediately sets in and the plant dies. On this account, it is often considered the connecting link between the vegetable and the animal kingdoms, and those who cultivate it and depend upon it for support look upon it with a large degree of veneration and respect.

With the most favorable conditions for growth, the plant will not bear fruit under from eight to ten years. It attains a height of 50 or 60 feet and lives upward of a hundred years. If, on the contrary, the influences of climate and soil are not suitable, it will produce fruit in four years; but the life of the tree will not be prolonged beyond twenty years, and the fruit is of an inferior quality.

The chief requisite for the production of fruitful and profitable palms is a high degree of temperature in the summer—not less than 110° F. in the shade. The water and soil should, if possible, show a low percentage of saline and alkaline qualities, or, to use the local term, they should be "sweet." As rain seldom falls in the southern littoral of the Persian Gulf between April and December, the palms are supplied with moisture by irrigation; and where this can not be provided, the cultivation can not be undertaken—that is, so far as the Persian area is concerned.

It is reported that the date palm will not flourish within a distance of 25 miles from the sea. If this is the fact, it is probably owing to the impregnation of the atmosphere and the soil with an excessive percentage of salt; and this would seem to be in accord with the general principles observed in the selection of sites for the groves. A very important point observed in the cultivation of the groves is to have a proper proportion of male and female palms,

for unless there be sufficient pollen for the process of fertilization the plants will be unproductive. It appears from this that some technical knowledge is required for the successful management of the groves.

The production of the Persian palms is about 500,000 cwts. per year, nearly half of which is exported to India, Europe, America, and Africa. The customs valuation is about 85 cents per cwt. The dates produced in Persia and shipped from the gulf ports are hardly equal in size, flavor, and richness to those exported from Bassorah. This is doubtless due to more careful cultivation by the Arabian and Turkish producers.

In addition to the consumption of the dates in their raw state by the natives, considerable quantities are used in the manufacture of sirup, vinegar, and a liquor called "arrack," none of which are, so far as I know, articles of exportation.

There can be no doubt that if conditions of climate, soil, and water suited to the growth of the palm could be found in the Southern or Southwestern States, a very useful and profitable industry might be introduced for the benefit of the American people.

ALEX. MCDONALD,

TEHERAN, *May 26, 1897.* *Minister.*

RAILROAD LAWS IN VENEZUELA.

I have the honor to forward a translation of the new law on railroad construction in the Republic of Venezuela. This law will be undoubtedly a great stimulant to railroad enterprises, as subsidies and other favorable concessions are granted.

E. H. PLUMACHER,

MARACAIBO, *July 28, 1897.* *Consul.*

The Congress of the United States of Venezuela decrees:

ARTICLE 1. The National Executive is authorized to contract for the construction and exploitation of railroads in the Republic in accordance with the following law:

ART. 2. The Government of the Republic can make concessions for a term of ninety-nine years, and after said period the railroads, with all their machinery, offices, stores, etc., kept in good condition, shall become national property. These concessions can have exclusive rights for a term of forty years, according to agreements. The Government reserves the right to buy the road from concessionaries after the line has been officially opened for public service and been in operation for twenty-five years. In order to purchase the same, the Government is obliged to notify the contractors six months in advance. The Government shall have the option of buying according to valuation, with a premium of 20 per cent over the mercantile value of the enterprise, or of paying the value represented by its capital,

with a premium of 10 per cent. The price of the purchase shall be paid to the company as soon as a satisfactory transfer is executed.

ART. 3. The concessions shall be given to foreign or national syndicates, lawfully constituted; they may also be granted to any person who is able to give sufficient guaranty according to this law.

ART. 4. The railroads shall be divided into provisory and permanent roads. The provisory roads shall have a width between rails of 75 centimeters and a minimum curve of 30 meters. The permanent lines shall have a width between rails of 1.07 meters (1 yard 6 inches) and a minimum radius of curve of 60 meters. The grade of either line shall not exceed 3 per cent unless a special system of construction is employed.

ART. 5. The National Government can, whenever such action is considered to be for the benefit of the public, contribute to the construction of railroads a certain amount for every 20 kilometers (12.42 miles) completed. The amount of this subsidy shall be stipulated according to the plans and sketches presented by the contractor in accordance with article 7, and shall never exceed the following sums:

For provisory lines, 10,000 bolivars ($1,930) for every kilometer (0.62137 mile) of railroad on level soil; 20,000 bolivars ($3,860) for every kilometer of road on broken, swampy ground which may require additional work; and 30,000 bolivars ($5,790) per kilometer on mountainous roads. For permanent roads, if they are permanent from the beginning, 20,000 bolivars ($3,860) per kilometer on plain ground; 40,000 bolivars ($7,720) per kilometer on swampy or broken ground which may require additional work; and 60,000 bolivars ($11,580) per kilometer on mountainous country.

ART. 6. All railroad contractors, according to the importance of the concession, are obliged to deposit in the safe of any bank from 50,000 to 100,000 bolivars ($9,650 to $19,300) in gold, or its equivalent in public-debt certificates of Venezuela, as a guaranty for the commencement and continuation of the work in the time stipulated in the contract. This deposit shall be made within eight months after Congress has approved the contract, and it shall be returned to the contractor as soon as the first section of 20 kilometers (12.42 miles) of the line is completed and opened to the public. And if said deposit is not made within the time specified, the concession shall be considered as null; and if the stipulated guaranties do not accompany this deposit, it becomes Government property and shall be immediately applied to the fund known as the debt for public instruction. It is also necessary, in order to obtain a railroad concession, that a previous deposit of 20 bolivars ($3.86) in gold be made by the petitioner for each kilometer of concession, or its equivalent in certificates of public debt of Venezuela, which shall be transferred to the debt for public instruction immediately after Congress has approved the contract.

ART. 7. The date for commencing work shall be specified in each contract, and shall never be more than twelve months from the day on which the contract was approved by Congress, and the date on which the line shall be opened to the public shall also be specified. The contractor must present the general plans of the lines, as well as longitudinal and cross sections within three months before commencing work, and only on account of unforeseen circumstances shall he have a right to a longer period, either for beginning or concluding the work or for presenting plans, and in such cases the time granted must be the same as the time lost.

ART. 8. The Government can demand that a provisory line be changed into a permanent road when its annual traffic averages 80,000 tons during two consecutive years, which figures are found by dividing the number of passengers and freight transported and the number of kilometers covered by the length of the line in kilometers. Each ton of merchandise and each passenger shall be counted as a unit. The Government may request that said change be made within five years from the day on which the company was notified that the line should be made permanent.

ART. 9. The fares for freight and passengers shall be decided by the Government, which will have the right to reduce them, once the earnings exceed 12 per cent of the capital of the company and when on permanent lines they exceed 8 per cent. The reduction shall be made so as to obtain on the capital of the company (supposing that the traffic has been uniform for two years) an interest of 12 per cent and 8 per cent, respectively.

ART. 10. In every contract granted, it shall be specified that all official correspondence shall be carried free over all the line, and that Government troops and merchandise shall always be carried for half fare, as well as Government employees when on official missions.

ART. 11. The Government shall grant the contractor the ownership of all public lands occupied by the width of the line by stations, offices, and stores, and can also grant a greater amount of land on each side, according to the importance of the line; but the grants will not be continuous on both sides of the line. Government land and railroad land will alternate in equal proportions. The right of ownership of the lands granted shall not take effect until the railroad is open to the public.

ART. 12. The National Government grants for the construction and exploitation of railroads the following concessions and privileges:

(*a*) The expropriation according to law of private property necessary for the line for switches, offices, stores, and warehouses. The Government will order the expropriation and the company shall pay according to law.

(*b*) The right to introduce free of duty through the custom-houses, during the privileged period, all materials, machinery, tools, and articles necessary for the construction, exploitation, and preservation of the line and buildings of the company, the same to be always subject to the provisions contained in the national code and other laws upon the matter.

(*c*) The right to take, without any compensation whatever, national lands, timber, and like materials necessary for the construction of the line.

(*d*) The exemption from all national taxes, except stamp expenses, which pertain to the fund of public instruction.

(*e*) The right, preferred before that of any other person or company (if legal formalities are complied with), to acquire all mines and stone quarries found on the route of the road to be constructed.

ART. 13. The company is bound to give all information requested by the Government in regard to the road and also to show its books, documents, and vouchers, and to publish weekly reports of the condition of the line.

ART. 14. All companies are bound to have their office in the capital of the Republic or in the principal city nearest the line with an accredited representative at the capital. This does not prohibit them from having their domicile in a foreign city.

ART. 15. The concession can not be partially or entirely transferred to a foreign government, and private transfers must be approved previously by the Executive.

ART. 16. All controversies respecting concessions will be settled by the courts of the Republic, and in no case can they be made cause for an international claim.

ART. 17. Railroad concessions shall be made only through contracts.

ART. 18. The Executive is authorized to enforce this law.

ART. 19. All other laws and dispositions upon the subject are hereby abolished.

Under date of June 12, 1897, Consul Plumacher sends from Maracaibo a translation of a decree in regard to the Coro and La Vela Railway and Improvement Company.* In accordance with

* Referred to in a report dated May 6, 1897, printed in CONSULAR REPORTS No. 201 (June, 1897), p. 320.

the new law on railroads, the Government of Venezuela grants a subsidy of 20,000 bolivars ($3,860) for each kilometer (0.62137 mile) of road constructed. Payment is to be made for sections of 12 kiiometers each.

VENEZUELAN RAILWAY ENTERPRISE.

Consul Plumacher sends from Maracaibo, under date of June 6, 1897, a translation of a lengthy report by a commissioner who was appointed by the Government to investigate the smuggling on the frontier of Colombia, and also the condition of the Cucuta and Tachira railroads. The consul adds that this report is of interest because the directors of the Tachira road are in communication with American capitalists to raise the means to enable them to finish the road. It is also interesting in view of the recent treaty between Venezuela and Colombia relative to navigation, interstate commerce, and frontier limits.

A summary of the report is as follows:

The smuggling on the frontier between Venezuela and Colombia has increased alarmingly.

A large number of articles are imported through the custom-house of San Antonio—cotton and woolen goods, alimentary products, leather articles, etc.—amounting to a value of 1,000,000 bolivars ($193,000) annually. The exportations from Venezuela to Colombia through the same custom-house, which consist mainly of cattle and rum, are much inferior, both in quantity and value, although exact figures can not be obtained. The Government of Colombia has a monopoly of rum and salt. Some 2,500,000 kilograms (5,511,500 pounds) of salt pass annually through the custom-house of Maracaibo to Cucuta, two-thirds of which, it is roughly estimated, is consumed in the region of the Tachira and one-third in Colombia.

In view of the importance of the commerce over the Tachira frontier, the San Antonio custom-house should not be abolished; but foreign merchandise of ultramarine origin should not be imported via Cucuta, since all that is needed for local consumption can be carried in coasting vessels from Maracaibo to Encontrados.

As to the cost of transportation of the two railroads, Cucuta is situated southwest of Encontrados, and all the towns of the Tachira region are northeast or southeast of Cucuta. The Cucuta road runs northwest 54 kilometers (nearly 33 miles) to Villamizar, a Colombian port on the River Zulia, a short distance from the mouth of the La Guta. For the next 120 kilometers (74½ miles) conveyance is by means of steam launches when there is water; otherwise by boats, lighters, or canoes. Navigation is sometimes interrupted by drought. The terminus of the road is Encontrados, a Venezuelan port situated a little below the rivers Zulia and Catatumbo.

Cucuta is 8 kilometers (nearly 5 miles) from San Antonio, where the Venezuelan custom-house is established, and San Antonio is 28 kilometers (18.39 miles) from San Cristobal, the capital of the section and the principal mercantile center of the Tachira; so the Cucuta road comprises 210 kilometers—54 kilometers (33½ miles) of railroad in Colombia, 120 kilometers (74½ miles) of navigation in Venezuelan waters, and 36 kilometers (22⅓ miles) of trails in Venezuelan territory.

The La Fria (Tachira) road starts from Encontrados southwest toward the center of the Tachira section, and runs to Uraca. The total length of the road is 150 kilometers (93.2 miles), of which 114 kilometers (70.83 miles) are in railroad and the remainder in trails. It has the same length in trails as the Cucuta road, but its total length is 60 kilometers (37.28 miles) less than the Cucuta road, which shows the unquestionable advantage it would have, when once completed, over the Cucuta road, both in rapidity and in cheapness of transit. The inhabitants of the Tachira section are chiefly engaged in the porterage of foreign merchandise, as well as native products, which are exported via Cucuta. It is thought that if the road were extended to San Cristobal and Rubio, it would receive enough additional patronage to pay for its construction. This enterprise is considered one of the most secure and lucrative in the Republic. The railroad will doubtless be the foremost factor in the development of the country. The amount received from the transportation of coffee alone represents a fair interest on the money now invested.

As to the expenses of the two lines, it is difficult to make a comparison between a line already finished and one which yet awaits completion. From Uraca to Colon, is a distance of 8 kilometers (nearly 5 miles), and the country is rough, which would necessitate additional outlay; but the building of the railroad would be partly compensated by the saving of the constant expense of repairing the trails. Once the road is completed to Colon, three-fourths of it could compete successfully with the Cucuta line. Funds could be obtained to finish the road to Rubio if the Government should prohibit the importation of foreign merchandise and salt through the custom-house at San Antonio via Cucuta and order that such goods be dispatched along the coast from the Maracaibo custom-house to Encontrados. In this way, the traffic from Encontrados to Cucuta will decrease to 6,000,000 kilograms, representing two-thirds of the 9,000,000 kilograms (19,841,400 pounds) which, according to report, were shipped over the Cucuta route in 1894. Some 15,340,000 kilograms (33,818,564 pounds) of coffee were sent via Cucuta to Encontrados, two-thirds of which quantity was from the Tachira region. Now, if the traffic of the Tachira were concentrated on its own line, its shipments of coffee and the goods imported for local consumption would exceed the amount carried by the other line, especially since the new route is equally convenient. At the same time, the smuggling would decrease.

To give an idea of the extent of this smuggling, take the figures given above for the export of coffee. At the average price for coffee of 1.50 bolivars (28.4 cents), the customs duties should have amounted to at least 5,000,000 bolivars ($965,000). In no year has the eighth part of this amount ever been collected. The smuggling has been facilitated by the legal permission granted for the introduction of foreign merchandise by land to the custom-house of San Antonio. With this permission revoked, all goods crossing the frontier can be seized with the knowledge that they are smuggled.

The San Antonio custom-house should still be kept open and allowed to import as much from Colombia as Venezuela exports to Colombia. By this limitation of the sphere of activity of the custom-house at San Antonio, the railroad would be enabled to obtain the necessary capital to run its line to San Cristobal and Rubio. San Cristobal is 54 kilometers (33½ miles) of plains distant from Teteo, the principal port from where the Uribante River is navigable. By way of the Apura and Orinoco rivers, the ocean can be reached, and one can return to Tachira by Lake Maracaibo, touching at all the States of the Union. No other line in Venezuela has such military and mercantile importance. To avoid the introduction of foreign merchandise at San Antonio via Cucuta, it must be dispatched by the Maracaibo custom-house as coastwise goods and sent to Tachira by way of Encontrados.

With a period of at least four months allowed for transfer, no injury to the trade would ensue.

The Cucuta road is dependent upon the Colombian exports and imports as well as the Tachira trade. The Tachira road, on the other hand, needs only the local trade and has already paid dividends on the capital invested. The Tachira road is entirely overland; it starts and ends in Venezuelan territory, and it does not subject freight to several changes in the medium of transportation, as well as avoiding the necessity of passing through three custom-houses, viz, Maracaibo, Cucuta, and San Antonio. Goods will go straight from Maracaibo to Encontrados, time and labor will be saved, and freight rates will be reduced.

Since the Tachira Railway reached La Fria, persons have left Maracaibo and arrived in San Cristobal in three days; and goods sent by this line arrived four days in advance of the invoices sent via Cucuta. A junction of the two railroads would not aid the Tachira road and would not prevent the smuggling. It is to be noted that when there is deep water in the Zulia River, the current price of salt in San Cristobal is from 50 to 60 bolivars, and when the river is dry, the prices are doubled. The proposition to establish a joint custom-house at Maracaibo is not feasible.

It is certainly to the interests of Venezuela to have control of a railway between Tachira and the port of Maracaibo. The road will facilitate the establishment of external trade relations; and if foreign merchandise of ultramarine origin is excluded from the San Antonio custom-house, it will strike the most effective blow against smuggling.

HERON HUNTING IN VENEZUELA.

Under date of January 15, 1897, I forwarded to the Department a translation of a decree from the Treasury Department of Venezuela in regard to the hunting of herons and the gathering of their plumes.*

I have to-day the honor to forward a translation of the decision of the supreme court of Venezuela, declaring the decree of the Executive unconstitutional, trespassing upon the rights of the sovereign power of the States, as well as individual rights.

E. H. PLUMACHER,

MARACAIBO, *August 27, 1897.* *Consul.*

The decision states that, according to the constitution, the States have a right to dispose of their natural products, except mines, salt, and public lands, which are controlled by the General Government. Industrial rights are also guaranteed by the constitution to all Venezuelans. The decree of December 23, 1896, prohibiting the killing of herons, is not only a coercive measure, but tends to destroy a home industry, placing it at a disadvantage in competition with that of other countries. The decree also restricts the rights of property owners, which, according to the civil code, are absolute unless the

* Published in CONSULAR REPORTS No. 199 (April, 1897), p. 480.

property is illegally used. Further, the prohibition of hunting with firearms is at variance with the civil code, which declares that this is subject to special laws. The supreme court of Venezuela accordingly revokes the decree.

WHARFAGE CHARGES AT MARACAIBO.

I inclose a translation of the new tariff in regard to the charges for porterage, etc., at Maracaibo. The new wharves are finished, and also a part of the custom-house. The tariff will be of interest to merchants and travelers.

E. H. PLUMACHER,

MARACAIBO, *August 2, 1897.* *Consul.*

MARACAIBO WHARVES JOINT-STOCK COMPANY (CAPITAL, 800,000 BOLIVARS=$154,400).

TARIFF DETERMINED BY THE DIRECTORS OF THE COMPANY AS TO CHARGES FOR LABOR, HAVING BEEN IN FORCE SINCE JANUARY 1, 1894.

Importation.—For receiving at the wharf, conveying to the custom-house, storing in its warehouses, transferring to the examining room, weighing, conveying to commercial establishments, and stowing all merchandise and products coming from foreign ports and national ports outside of Lake Maracaibo, 1.20 bolivars (23 cents) shall be charged for each 100 kilograms (220.46 pounds) gross weight.

For receiving and forwarding at the wharf, conveying to the commercial house, and there stowing all merchandise, produce, and other articles proceeding from the ports of Lake Maracaibo and its tributary rivers, 65 centimes (12 cents) shall be charged for each 100 kilograms (220.46 pounds) gross weight.

Exportation.—For receiving at a commercial house, conveying to the wharf, weighing, and stowing there all merchandise, produce, and articles intended for foreign ports or national ones outside of Lake Maracaibo, 65 centimes (12 cents) shall be charged for every 100 kilograms (220.46 pounds) gross weight.

Imports in transit to Colombia.—For receiving at the wharf, conveying to the custom-house, weighing and examining, and stowing in the transit warehouse all merchandise, produce, and other articles received from any port, 90 centimes (17 cents) shall be charged for every 100 kilograms (220.46 pounds) gross weight.

For transferring from the transit warehouses of the custom-house to the wharf, and there stowing, any of the above-mentioned articles, 30 centimes (5 cents) for every 100 kilograms (220.46 pounds) gross weight.

Baggage.—For receiving at the wharf, conveying to the custom-house, and from there to the owner's house, the tariff on baggage shall be as follows: For each parcel weighing up to 20 kilograms, 50 centimes; weighing from 21 to 70 kilograms, 1 bolivar; weighing from 71 to 100 kilograms, 2 bolivars. Baggage weighing over 100 kilograms shall pay at the rate of 50 centimes for every 50 kilograms of excess, all gross weight.

The above-mentioned rates shall be charged on baggage which is to be taken to places situated in the city. When taken outside of the city limits, the price of cartage shall be arranged with the owner.

Should owners or consignees of goods prefer not to employ wharf laborers in

conveying their imported and exported cargoes or baggage (after they have passed through the custom-house), the company will charge one-half of the corresponding tariff on their goods.

When the owners or consignees, with the consent of the National Government or custom-house authorities, transship any of their merchandise, produce, or other goods, the company shall always charge one-half of the respective taxes. Small fruits, natural wood, horns, bones and hoofs, bark, seeds, and dyewood are excepted.

The owners, consignees, or shippers of wood, bark, seeds, horns, bones, etc., imported from Lake Maracaibo or its tributary rivers and intended for export to a foreign port or other national ports outside of the lake, are not bound to employ the wharf laborers for the transportation of these goods.

When the wharf laborers perform work not covered by this tariff, the price for said work shall be previously agreed upon between the interested party and the administrator of the company.

In order to avoid difficulties in the liquidation and computation of accounts, all imported or exported goods of less than 100 kilograms in weight shall be considered as of 100 kilograms.

A. M. MONTIEL.

MARACAIBO, *July 28, 1897.*

WATERWORKS AT MARACAIBO.

I have the honor to forward a translation of a contract made between parties at Maracaibo and the Government of Venezuela for the construction of a fresh-water canal from the River Palmar to this city. This public work will be of great benefit to the surrounding country and also to the city of Maracaibo, which is without drinkable water, except that gathered during the rainy season in cisterns. As it often occurs that we have no rainfall for twelve to fourteen months, it is easily understood that this work is of vital interest to this country.

E. H. PLUMACHER,

MARACAIBO, *July 6, 1897.* *Consul.*

The Congress of the United States of Venezuela decrees:

The contract made between the national Executive and Messrs. Francisco Fossi Ferrini, Luis Muñoz Tebar, Ernesto C. Wendt, and Amilcar Troncone, for the opening at Maracaibo of a canal of irrigation has been approved in all its parts and is of the following tenor, viz:

Gen. Francisco Tosta Garcia, Minister of Finance of the United States of Venezuela, sufficiently authorized by the national Executive and with the affirmative vote of the Government council for the first part, and Dr. Francisco A. Risquez, of age, a citizen of the Federal District, and special attorney of Messrs. Francisco Fossi Ferrini, Luis Muñoz Tebar, Ernesto C. Wendt, and Amilcar Troncone, who have formed a syndicate in the city of Maracaibo with the view of opening a canal to cross the plains and forests in that vicinity, have agreed upon the following contract:

ARTICLE 1. The syndicate binds itself to organize a joint-stock company, to reside at the city of Maracaibo, under the title of Irrigating Canal Company, for the purpose of constructing, within six years, counting from the date on which this contract is approved by Congress, a canal with the object of fructifying the dry lands located in the plains of the district of Maracaibo and give a good and suf-

ficient supply of drinkable water to a great number of breeders who are in need of it during the dry seasons.

ART. 2. Said canal will be started from any place between Palmarito and Caricorial, on the Palmarito River, in the district of Perijá; its width at the beginning shall be 10 meters (10.9 yards); this may become less, but shall always be sufficient to convey the water required. The canal shall cross many breeding places and go as far as the spot called Aguacates; from there it will follow the valley of Tragoni and end at Sabana Rica.

ART. 3. If it is found convenient, the company can divide the canal and branch it toward the city of Maracaibo, in order to provide the city with fresh water, if possible.

ART. 4. The work of constructing the canal shall be commenced within one year after Congress has approved the contract, and the Government grants to the company from to-day the perpetual and irrevocable right of ownership of the canal which they may construct as per this contract.

ART. 5. The machinery, materials, instruments, tools, and utensils employed in this construction shall be exempt from all national taxes; and the company will receive no subsidy or guaranty of interest on the capital invested, but will pay as contribution to the National Government 5 per cent of the profits of the exploitation when dividends are distributed to the shareholders.

ART. 6. Any private lands which shall be found necessary for the construction of the canal shall be expropriated by the Government and paid for by the company in accordance with the law upon the subject.

ART. 7. The Government of the Republic considers this enterprise similar to that of a railroad, and therefore grants to the company, with no indemnity whatever, ownership of one-half of the public lands situated on alternating sides of the canal, the dimensions of the grants not to exceed 500 meters (546 yards) in cross sections and 1,000 meters (1,093 yards) bordering on the canal, as per fifth part of the third article of the law on public lands.

ART. 8. The tariffs for irrigation rights and also for drinking places for cattle shall be determined with the approval of the Government, and may be modified in the same way.

ART. 9. The present contract can be transferred to any person or company, native or foreign, by means of a previous notification to the Government, and any doubts or contraventions which may arise between the contracting parties shall be decided by the courts of the Republic according to law; and in no case can they be made cause for international claims.

TOBACCO IN MARTINIQUE.

I have the honor to inclose herewith a translation of a clipping from the Moniteur de la Martinique (official journal) of the 27th instant. Since the promulgation, on the 11th of January, 1892, of the new French tariff, the operations whereof, according to special provisions, are applicable to the colonies of Martinique, Guadeloupe, Cayenne, and Réunion, a system has been put in force by which the products of one colony can be imported into another without any other duty than an octroi, or municipal, tax, said products being exempt from differential duties (droits de douanes). Hence, Guadeloupe molasses is received here with a small octroi; coffee from the same place pays only a local tax, and so forth.

It is in accordance with this principle that tobacco and its manufactures from Algiers can now be admitted into this island free of differential duty. The conseil générale (general assembly) having voted a bounty on tobacco grown in this island with the view to the extension of this industry (which exists now on a small scale) and a heavy duty having been imposed on foreign tobacco with the view to the protection of the local planters, there is much dissatisfaction expressed concerning this new enactment. It will probably have a tendency to materially curtail United States trade with this island.

JULIUS G. TUCKER,
Consul.

MARTINIQUE, *July 27, 1897.*

[Translation.]

The sections of finance, war, and marine of the colonies, constituting the council of state, considering the administration of the customs duties to be applied to tobacco manufactured in Algiers on its introduction into such colonies as are under the customs laws of the mother country, have, in a meeting held on the 11th of May, 1897, decided that such tobacco should be admitted free. I have the honor to inform you that I have adopted this view, and I request that you will, in pursuance thereof, issue orders accordingly.

E. ROUME.

PARIS, *May 22, 1897.*

WOOL IN THE ARGENTINE REPUBLIC.

The general interest manifested both here and in the United States on the subject of sheep husbandry and wool leads me to transmit the following data and impressions regarding the industry in this Republic.

It may not be out of place to say at the outset that I have been an interested observer of the change taking place in the character of the flocks of this country, and of the new conditions which have in consequence been noticeable in the wool and sheep market of this city. The figures and opinions given herein are the result of a careful personal study covering some time, and I need not add, therefore, that I trust my desire to forward such information on the subject as I could may be accepted as my apology for what may seem to be an excessive recurrence of my own views on the subject.

In the beginning, let me say that I am inclined to believe, although I realize fully the risk of criticism I run in making the conjecture, that a probable maximum production of wool has been nearly reached here. In making this statement, I in no sense wish to be understood as believing that the development of the country will be either slow or small in the future. I am a firm believer that this country will show a remarkable development during the next ten or twenty years.

My reasons for this belief regarding wool production here are: The great increase which has taken place, and which continues, in the exportation to Europe of live sheep and of frozen mutton; the marked and profitable attention being given the production of fat cattle for export and the consequent neglect of sheep husbandry by such estancieros; the reasonable probability, it appears to me, that whatever increase may take place in the production of wool in the undeveloped southern portion of the Republic, by reason of an increase there in population, will be offset by a reduced wool production in the central and northern portions of the Republic, where the area of grazing land which can be profitably left uncultivated will be reduced if the desired tide of immigration sets in toward this country; because it is but reasonable to conclude, using the past history of the country as a basis, that four-fifths of whatever immigration comes here will remain in the present well-settled central zone rather than go to the cold and unsettled lands of the southern portion of the Republic. If this is true, the area of grazing land now occupied by sheep in the center of the Republic will certainly be greatly decreased by an increased agriculture. In addition to the above, there is to be taken into account the effect had on the flocks of this country, as on those of all other countries, by drought, locusts, cold seasons, and diseases.

I think two-thirds of the immigrants now coming here are Italians. Using our own experience as a guide, it seems probable that these will add but little to the development of sheep husbandry in the far southern portion of the Republic while opportunity is found to settle in the warmer and more closely populated portions of the country, where they are more than reasonably sure to succeed in accumulating a modest competence as a result of their labor upon small farms and in different industries.

During each of the past twenty years, the quantity of wool exported from this Republic has been as follows:

Year.	Quantity.	Year.	Quantity.
	Tons.		*Tons.*
1877	97,310	1888	131,743
1878	81,708	1889	141,774
1879	91,951	1890	118,406
1880	97,146	1891	138,606
1881	103,877	1892	154,635
1882	111,010	1893	123,230
1883	118,404	1894	161,907
1884	114,345	1895	201,353
1885	128,393	1896	187,619
1886	132,130	1897 (approximate)	186,000
1887	109,164		

It will be seen from the above that the increase in production has been a trifle over 92 per cent in the past twenty years.

The position which the United States has occupied as a market for Argentine wool during the twenty years quoted may be seen from the following:

Year.	Argentine wool exported to United States.	Percentage of total exportation.
	Tons.	*Per cent.*
1877	2,608	2.67
1878	3,311	4.52
1879	3,813	4.14
1880	3,827	3.72
1881	2,577	2.48
1882	991	0.89
1883	3,823	3.23
1884	2,153	1.88
1885	4,240	3.3
1886	3,796	2.87
1887	4,001	3.66
1888	2,333	1.77
1889	5,106	3.6
1890	6,502	5.48
1891	5,781	4.17
1892	5,226	3.4
1893	4,449	3.61
1894	6,129	3.78
1895	12,187	6.05
1896	9,560	5.09

It will be noted that the sum total of Argentine wool exported to the United States during any one of the past twenty years has not exceeded 6.05 per cent of the total exports of the Republic, while it has fallen as low as 0.89 per cent. The mean average for the twenty years has been 3.51 per cent.

I have stated that the statistics of this year's clip have not yet been made up. It may be safely estimated, however, as above given—in other words, about 435,000 bales. Of the wool exported to the United States during the present season—50,000 bales, more or less—I estimate that 35,000 bales have been fine "cross Lincoln." The remaining 15,000 bales have been what is known by us as "Cordoba," or, as it is known here, "Criollo" wool. This would indicate that we have found here a very desirable wool, and evidently one required by our manufacturers which we have not heretofore bought. I am told by those engaged in the wool trade, and have been shown confirmatory letters from the United States, that this Argentine "cross Lincoln" wool has been well received by our manufacturers; that it has given them excellent results; and that they will continue their purchases. From my knowledge of our wool industry, I should say

that we produce but very little of this class of wool, which is, it may be said, a specialty of this country alone.

Regarding what is here termed "Criollo" wool, or "Cordoba," as it is known with us, I believe, from what I have seen of the sheep in the provinces from which this grade of wool comes, that we can not profitably raise them; and their peculiar adaptation to the climate and rough "camps" of the provinces where they are reared leads me to feel sure that we have not tracts of land so well adapted by natural conditions to sheep raising as are the provinces I speak of. Furthermore, had we such land, it would not pay our farmers to use it for this class of very ordinary sheep, because they could do much better with something else.

I am satisfied from my observation that the production of this particular class of wool is decreasing here slowly but steadily. This arises from the cause already spoken of—the use of Lincoln blood. It has been found, however, by flock owners in Cordoba that crossing their flocks with this blood is not giving as good results as were anticipated. In consequence of this, many are discontinuing the use of Lincoln or other long-wool blood, preferring to keep their flocks in the original condition.

The entire absence, both here and in Rosario (the port from which 95 per cent of this wool is exported), of market quotations on this class of wool has made it exceedingly difficult for me to ascertain prices. I have been fortunate enough, however, to secure from authentic private sources data which has enabled me to prepare the table of prices presented herein.

It is exceedingly interesting to note the rapid and striking change which has taken place in the character of the flocks of this country during the past ten years. At first, there was certainly not more than 7 per cent of "cross Lincoln" wool in the total Argentine clip. Now, it is estimated that this wool forms more than 65 per cent of the total clip. This change has been brought about primarily as a result of the growing demand, to which I have already referred, for large-bodied sheep for export.

There are those who believe that the great change which has thus taken place in the character of the flocks of this country will be found to be disadvantageous within a few years. Their argument is, that this country would not be in a position to satisfy a demand for fine wool should a change take place in the character of woolen goods demanded. They seem to think, on the other hand, that if the demand for long wool and for mutton sheep continues, this country will soon have to compete with the newly developed sheep and wool producing countries; and, in consequence, they think the flocks of this Republic will have no especial advantage.

When I say that during the three years I have been here the price of "cross Lincoln" wethers has been from 75 cents to $1.75 (Argentine paper) higher per head than that for Rambouillet wethers, it may easily be seen that it has paid the Argentine sheep farmer to meet the demand for mutton sheep. When to this we add the fact that "cross Lincoln" wool has commanded from 1 to 2 cents (gold) more per pound than has fine wool during the same period, it is plain to see that it has been to the advantage of the farmer to change his flock from a fine wool to a "cross Lincoln" type.

In considering the wool industry here, it is interesting to notice the relative cost of transporting Argentine and United States wools to one of our own markets, say Boston. During this season, the freight on wool by steamer between this port and Boston has been $3 to $3.20 (gold) per bale for full cargo, and by sailing vessel $2 to $2.50 for full cargo. Some shipments by sailing vessel to Boston have been made at $1.50 per bale. The rates for less than full cargoes have been $4 per bale to New York and $5 to Boston. The average weight of a bale of wool is about 800 pounds. This makes the rate on full cargoes between this city and Boston, more or less, 40 cents per 100 pounds by steamer and, say, 30 cents per 100 pounds by sailing vessel. Comparing these rates with those in force on our railways, it will be found that the highest is 28 per cent less than the car-load wool rate between Columbus and Boston, 43 per cent less than that between Chicago and Boston, and 67 per cent less than that between Dallas and Boston.

I had so often heard and seen the statement, made both in the United States and here, that our customs-tariff legislation on wool affected advantageously or disadvantageously the value of the commodity in this market that I was led to make as careful a study of that phase of the subject as I could.

In order that I might get at the facts in the case, I went to the National Library and compiled the following tables covering the Buenos Ayres price of fine wool for the past thirty years and of "cross Lincoln" for the past seven years from the columns of Los Anales de Agricultura, an authentic publication of the national Sociedad Rural. The table referring to Cordoba wool is based on private information, as already explained. In preparing the first table, I desired to begin at an earlier date than 1866, but could not do so, as the publication quoted began during that year.

I went no further back than 1890 in giving prices on "cross Lincoln," for the reason heretofore stated—that, previous to that year, such wool comprised but a very small per cent of the total clip.

I took as a basis the 15th of December and of March in each year in the first two tables, for the reason that these two months

mark the beginning and height of the wool season here. In the first two tables, I have given, first, the price received in the current money of the country; then, the price per pound in Argentine gold, in order that the price received by the seller may be studied in relation to the kind of money received.

In the table referring to Cordoba wool, I have given but one price—United States gold per pound—for the reason that it was impossible to do more than that in the absence of public quotations.

The tables following show the price of fine (merino) wool in the market of Buenos Ayres from 1866 to 1897 of "cross Lincoln" wool from 1890 to 1897, and of Cordoba wool in the market of Rosario from 1887 to 1897. In Tables 1 and 2, up to March, 1886, the prices in columns 1, 2, and 3 are stated in the current paper money of that time. This was worth, in gold, 4 cents on the dollar; the price in column 5 has been reached, therefore, by reducing the average price given in column 3 at that rate. Since March, 1885, there has been a continuous premium on gold. Between that date and March, 1886, it has been necessary, therefore, to reduce the current gold value of the money (4 cents on the dollar) to its actual gold value, as governed by the premium on gold given in column 6. Beginning with December, 1886, the prices in columns 1, 2, 3, and 4 are stated in the paper money then and now current here. Since this latter date, the price given in column 5 has been reached by reducing the price given in column 4 by the gold premium given in column 6. Up to December, 1886, the prices are quoted on "arrobes," equal to 25 pounds. After that date, they are quoted on 10 kilograms. The price in column 5 is per pound and in Argentine gold.

TABLE 1.—*Prices of fine wool (merino).*

Year.	Month.	Price per arroba of 25 pounds.			Price per pound.		Gold rate.*
		Lowest.	Highest.	Average.	Paper.	Gold.	
		1.	2.	3.	4.	5.	6.
		Pesos.	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*
1866	December	50.00	58.00	54.00	.....	0.0864	.....
1867	March	50.00	58.00	54.00	.....	.0864	.....
	December	48.00	52.00	50.00	.....	.08	.....
1868	March	47.00	53.00	50.00	.....	.08	.....
	December	55.00	58.00	56.50	.....	.0904	.....
1869	March	45.00	50.00	47.50	.....	.076	.....
	December	45.00	50.00	47.50	.....	.076	.....
1870	March	52.00	55.00	53.50	.....	.0854	.....
	December	45.00	48.00	46.50	.....	.0744	.....

* By "gold rate" is meant the average quotation of gold on the Bolsa; in other words, the value in paper money of $1 Argentine gold (96½ cents United States). The seller of wool is always paid in the paper currency of the country.

TABLE 1.—*Prices of fine wool (merino)*—Continued.

Year.	Month.	Price per arroba of 25 pounds.			Price per pound.		Gold rate.
		Lowest.	Highest.	Average.	Paper.	Gold.	
		1.	2.	3.	4.	5.	6.
		Pesos.	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*
1871	March	49.00	50.00	49.50	.....	.0792	.....
	December	75.00	75.00	75.00	.....	.12	.....
1872	March	98.00	98.00	98.00	.....	.1568	.....
	December	70.00	80.00	75.00	.....	.12	.....
1873	March	65.00	70.00	67.50	.....	.108	.....
	December	66.00	70.00	68.00	.....	.1088	.....
1874	March	60.00	70.00	65.00	.....	.104	.....
	December	75.00	80.00	77.50	.....	.124	.....
1875	March	68.00	75.00	71.50	.....	.1144	.....
	December	68.00	75.00	71.50	.....	.1144	.....
1876	March	60.00	70.00	65.00	.....	.104	.....
	December	80.00	82.00	81.00	.....	.1296	.....
1877	March	70.00	80.00	75.00	.....	.12	.....
	December	90.00	95.00	92.50	.....	.148	.....
1878	March	80.00	88.00	84.00	.....	.1344	.....
	December	82.00	103.00	92.50	.....	.148	.....
1879	March	90.00	95.00	92.50	.....	.148	.....
	December	90.00	105.00	97.50	.....	.156	.....
1880	March	85.00	110.00	97.50	.....	.156	.....
	December	95.00	100.00	97.50	.....	.156	.....
1881	March	90.00	94.00	92.00	.....	.1472	.....
	December	80.00	90.00	85.00	.....	.136	.....
1882	March	65.00	70.00	67.50	.....	.108	.....
	December	75.00	80.00	77.50	.....	.124	.....
1883	March	65.00	70.00	67.50	.....	.108	.....
	December	80.00	95.00	87.50	.....	.14	.....
1884	March	82.00	85.00	83.50	.....	.1336	.....
	December	82.00	90.00	86.00	.....	.1376	.....
1885	March	100.00	105.00	102.50	0.164	.1219	134.50
	December	85.00	90.00	87.50	.14	.0995	140.60
1886	March	100.00	102.00	101.00	.1616	.1038	155.60
	December	3.80	4.00	3.90	.1773	.1367	129.70
1887*	March	3.80	4.10	3.95	.1795	.135	133.00
	December	4.00	4.50	4.25	.1932	.1348	143.30
1888	March	3.50	3.75	3.625	.1648	.1087	151.60
	December	3.35	3.70	3.525	.1602	.1115	143.60
1889	March	3.80	4.90	4.35	.1977	.1246	158.70
	December	6.80	8.50	7.65	.3477	.1474	235.80
1890	March	7.50	9.10	8.30	.3773	.1512	249.50
	December	6.70	9.40	8.05	.3659	.1277	294.10
1891	March	6.90	9.10	8.00	.3636	.1022	355.57
	December	.....	.....	.....	.....	.....	.....
1892	March	7.30	9.00	8.15	.3705	.1039	344.08
	December	.....	.....	.....	.....	.....	.....
1893	March	7.70	8.40	8.05	.3659	.1174	311.50
	December	.....	.....	.....	.....	.....	.....
1894	March	7.20	8.10	7.65	.3477	.0987	352.00
	December	6.60	7.20	6.90	.3136	.0896	350.00
1895	March	7.20	7.40	7.30	.3318	.0943	351.80
	December	7.20	7.80	7.50	.3409	.1032	330.20
1896	March	7.70	7.90	7.80	.3545	.1140	310.80
	December	6.80	7.00	6.90	.3136	.112	280.00
1897	March	7.20	8.00	7.60	.3454	.1116	309.40

* Per 10 kilograms (22.046 pounds).

TABLE 2.—*Prices of "cross Lincoln" wool.*

Year.	Month.	Price in pesos (dollars), paper currency, per 10 kilograms (22.046 pounds).			Price per pound.		Gold rate.*
		Lowest.	Highest.	Average.	Paper.	Gold.	
		1.	2.	3.	4.	5.	6.
		Pesos.	*Pesos.*	*Pesos.*	*Centavos.*	*Centavos.*	*Pesos.*
1890	December	7.80	9.80	8.80	40	13.6	294.10
1891	March	7.70	9.40	8.55	38.86	10.92	355.57
	December	7.90	9.40	8.65	39.32	10.3	381.56
1892	March	8.20	9.40	8.80	40	11.62	344.08
	December	8.30	9.30	8.80	40	14.21	281.50
1893	March	8.70	9.40	9.05	41.13	13.2	311.50
	December	8.30	9.30	8.80	40	12.31	325.00
1894	March	7.60	9.20	8.40	38.18	10.84	352.00
	December	8.20	9.00	8.60	39.09	11.17	350.00
1895	March	8.15	8.55	8.30	37.73	10.72	351.80
	December	9.00	9.70	9.35	42.5	12.87	330.20
1896	March	9.40	9.60	9.50	43.27	13.92	310.80
	December	7.00	7.80	7.40	33.63	12.01	280.00
1897	March	7.50	8.00	7.75	35.23	11.38	309.40

* By "gold rate" is meant the average quotation of gold on the Bolsa; in other words, the value in paper money of $1 Argentine gold (96½ cents United States). The seller of wool is always paid in the paper currency of the country.

TABLE 3.—"*Criollo*" *or Cordoba wool.*

[Prices given are per pound in United States gold free on board ship in Rosario.]

Year.	Month.	Price per pound, United States gold.	Year.	Month.	Price per pound, United States gold.
		Cents.			*Cents.*
1887	March 30	12.23	1892 (Cont'd)	August 15	10.74
	August 15	11.92		December 15	10.85
	December 15	11.55	1893	March 30	11.26
1888	March 30	11		August 15	11.25
	August 15	10.7		December 15	11.26
	December 15	10.75	1894	March 30	9
1889	March 30	10.85		August 15	8.71
	August 15	11.36		December 15	9
	December 15	11.13	1895	March 30	9.63
1890	March 30	11.4		August 15	10.12
	August 15	10		December 15	11.24
	December 15	10.2	1896	March 30	10
1891	March 30	11.28		August 15	10.41
	August 15	10.21		December 15	9.6
	December 15	11.26	1897	March 30	9.65
1892	March 30	11		June 15	8.33

I think it would be exceedingly difficult for one to take the above tables of wool prices here and tell therefrom whether, during the time given, there had or had not been a United States customs tariff on wool.

It may be interesting to note that, whereas in 1880 Hamburg took 200,000 bales of Argentine wool, the shipments this season to the same port have been but 82,727 bales. Dunkirk is the port to which the greater portion of Argentine wool is now sent. The shipments to this port during this season have reached 220,084 bales, against 27,544 bales in 1882.

Havre, which was for years the main market for Argentine wools, has fallen to the ninth place, the tenth and lowest place being occupied by Marseilles.

I trust the information given herein may be of some slight value to those of our citizens interested in the subject.

WILLIAM I. BUCHANAN,

BUENOS AYRES, *June 15, 1897.* *Minister.*

TONNAGE DUES IN COLOMBIA.

I have the honor to forward a table showing the amount of tonnage dues collected on cargo landed and the manner in which it is assessed, as set forth in articles 3 and 6 of the tariff of Colombia, forwarded to the Department on February 9 and published in CONSULAR REPORTS No. 200 (May, 1897), p. 1.

Tonnage dues.—From the 19th of April, 1897, all vessels arriving in Puerto Colombia (Sabanilla) will pay the following tonnage dues for each ton of 1,000 kilograms landed (1 kilogram = 2.2046 pounds):

From—	Dues.	
	Pesos.	
April 19 to May 18	1.05	$0.42
May 19 to June 18	1.10	.44
June 19 to July 18	1.15	.46
July 19 to August 18	1.20	.48
August 19 to September 18	1.25	.50
September 19 to October 18	1.30	.52
October 19 to November 18	1.35	.54
November 19 to December 18	1.40	.56
December 19 to January 18	1.45	.58
January 19 and after	1.50	.60

United States gold is at a premium of 150 per cent.

JOHN BIDLAKE,

BARRANQUILLA, *July 23, 1897.* *Consul.*

MATCH CONCESSION IN COLOMBIA.

I have the honor to forward a copy of a contract that the Government of Colombia has made, granting a concession for the term of twenty-five years to Euripedes Salgar for the exclusive right to import, manufacture, and sell matches.

I also forward statistics showing the quantity, in kilograms, of matches imported through the port of Barranquilla during the first six months of 1897, by months and countries, the quantity imported through Rio Hacha during the year 1896, and the quantity imported through Cartagena from January to August (inclusive), 1896.

I endeavored to secure statistics from the other ports of Colombia, but have been unsuccessful. I do not give the value in dollars of the importations, as the consular invoices do not give the correct valuations, only the correct weights.

The contract is, in substance, as follows:

The contractors are obliged to make a guaranty deposit of 300,000 francs ($57,900). The privilege lasts for twenty-five years. The concessionary binds himself to establish match factories at Panama, Madrid (Serrezuela), and Cucuta, and to manufacture therein all the matches to be consumed in the Republic. The construction of the factories should begin within six months and terminate within eighteen months thereafter. The factories should be capable of producing matches in sufficient quantity to satisfy the needs of the country during the term of the contract and for ten years thereafter. The matches, whether of wood or wax, must not be inferior to those sold by R. Bell & Co., Bryant & May, Moncalieri, Roche & Co., or those known as the "Rhinoceros" and "Elephant" matches, made in Sweden. Agencies are to be established in the cities of Barranquilla, Cartagena, Rio Hacha, Medellin, Cali, Popayán, Pasto, Neiva, Bucaramanga, Tunja, Villavicencio, Manizales, Honda, and Vélez, and sufficient quantities must be maintained in each establishment for the needs of that section. The matches are to be sold in boxes at the following rates, per gross, with a rebate of 10 per cent for merchants in all the places named, except Panama and those on the Atlantic coast, where the rebate shall be 20 per cent:

		Pesos.*
Boxes of 25 matches	per gross...	$1.30
Boxes of 40 matches	do.....	3.10
Boxes of 70 matches	do.....	3.70
Boxes of 100 matches	do.....	10.50
Boxes of 500 matches	do.....	36.00
Wooden matches:		
Boxes of 50 matches	do.....	2.00
Boxes of 100 matches	do.....	4.00

Matches shall be retailed in the above-named establishments at prices not exceeding 15 per cent of the wholesale prices. In accordance with the demand from various sections of the country, new classes of matches shall be manufactured and

* The peso is probably meant. The value of the Colombian peso, April 1, 1897, was 46.8 cents

sold at the same rates. Accounts of the number of matches sold shall be rendered every six months to the Ministry of the Interior. Importations of materials used in the manufacture of the matches shall be free of duty.

The amount of 640,000 francs ($123,520) shall be paid annually to the Government; but this shall be offset by the interest on the 8,000,000 francs ($1,544,000) which the concessionary binds himself to lend the Government, and which will be presently stipulated. The concessionary shall pay to the Government, on account of increase in the consumption of matches during the term, 4,000,000 francs ($772,000), which shall be discounted from the loan of 8,000,000 francs. This amount of 4,000,000 francs represents the total value of the increase in consumption.

The above-mentioned loan shall be made as follows: Six hundred thousand francs ($115,800) within three days from the date of the contract, 600,000 francs within the following six months, 600,000 francs within the six months following the second payment, 2,400,000 francs ($463,200) a year after the third payment, and 3,800,000 francs ($733,400) a year after the fourth payment. The concessionary shall pay, over and above the interest on the amounts paid on account of the loan (which amounts constitute part of the price of the privilege, and which consequently can not be collected from the Government), during the first two years of the grant, 400,000 francs ($77,200) annually, the payments to be made bimonthly. During the third year he shall pay 304,000 francs ($58,672) under the same conditions. From the beginning of the fourth year of the privilege, the payment of the lease shall offset the interest on the loan. At the end of the term of the grant, only one-half of the loan of 8,000,000 francs shall be collected from the Government; the other half, as has been said, having been considered the value of the increase in consumption. At the end of the term, all the property employed in the manufacture of matches shall be transferred to the Government in good condition. From the beginning of the third year the market price of the matches shall be reduced 25 per cent. The concessionary shall buy all match factories at present existing in the Republic and pay indemnity according to the law.

The Government binds itself to prohibit the importation or fabrication of matches or materials for making the same after five months from the publication of the contract and during the twenty-five years that the privilege lasts. No matches shall be allowed to be sold that are not made by the concessionary, except those already on the market, in accordance with the terms of the law. The Government will allow the matches made by the concessionary in Panama to enter all the ports of the Republic free of duty. The materials for making the matches and for constructing the establishments shall be allowed to enter free, nor shall there be an export duty on the product of the factories. There shall be no taxes on the property during the term of the grant. At the end thereof, 4,000,000 francs, half of the loan before mentioned, shall be paid to the concessionary. Any differences arising as to the conditions of this contract shall be settled by the courts, and in no case shall diplomatic reclamation be made. The right can not be transferred to a foreign government. The company is allowed to have its domicile within or without the country, but must have an authorized agent at Bogotá.

If the factories are not constructed within the time allowed, the concessionary shall pay a monthly fine of 10,000 francs ($1,930), except in case of circumstances over which he has no control. If the quality of the matches is not as stipulated, fines shall be paid varying from $100 to $1,000 in each case. If the concessionary does not supply the quantities stipulated, for each month of delay the stipulated amount shall be increased 2 per cent, until ninety days have passed; but for the payment of the first two amounts of 600,000 francs, there shall be no delay granted. If the concessionary does not fulfill the contract, the Government can declare it void, with the loss to the concessionary of the sums already paid. The concessionary is

allowed to import matches into the country, instead of manufacturing them, if he shows to the satisfaction of the Government that the manufacture was prevented by circumstances over which he had no control. If in the course of the first three years the Government decides not to demand the reduction of 25 per cent in the price of matches, already referred to, the concessionary shall remit the 4,000,000 francs due on the loan to the Government. During the last year of the privilege, only enough matches shall be manufactured for the current demand, which shall be decided by statistics. The price of the matches shall be calculated in current coin at the rate of exchange of 140 per cent, and shall rise and fall according to the fluctuations of this money, both for wholesale and retail transactions.

BOGOTÁ, *May 3, 1897.*

Weight of importations of matches through the customs port of Barranquilla from January to June (inclusive), 1897.

Country.	January.		February.		March.		April.	
	Kilos.	*Pounds.*	*Kilos.*	*Pounds.*	*Kilos.*	*Pounds.*	*Kilos.*	*Pounds.*
United States	.....	.....	3,303	7,281	9,927	21,885	2,697	5,945
England	8,039	17,722	2,028	4,460	1,802	3,972	.....	.....
Germany	.....	.....	5,396	11,896	.....	.....	1,780	3,924
France	5,792	12,769	640	1,410	24,592	54,215	7,348	1,620
Italy	3,097	6,827	.....	.....	3,117	6,871	.....	.....

Country.	May.		June.		Total.	
	Kilos.	*Pounds.*	*Kilos.*	*Pounds.*	*Kilos.*	*Pounds.*
United States	3,096	6,825	6,591	14,530	25,614	56,468
England	5,766	12,711	3,488	7,689	21,123	46,567
Germany	5,566	12,270	9,025	19,896	21,767	47,987
France	2,875	6,338	.....	.....	41,247	90,933
Italy	6,572	14,488	.....	.....	12,786	28,167

During the year ended December, 1896, Rio Hacha imported matches to the weight of 1,777 kilograms (3,917 pounds). During the months of January to August (inclusive), 1896, Cartagena imported 77,876 kilograms (171,685 pounds) of wooden matches and 30,147 kilograms (66,462 pounds) of taper.

Taper matches are imported almost entirely from France. They are not used in the coast towns, but are shipped into the interior.

JOHN BIDLAKE,

BARRANQUILLA, *July 29, 1897.* *Consul.*

Consul Smyth writes from Cartagena, September 11, 1897, in regard to the monopoly:

Heretofore, matches consumed in this consular district have been imported principally from Sweden. During the last year, however, an American firm succeeded in introducing matches of United States manufacture here, and a promising trade seemed to be opened. Of

course, on account of the monopoly, such sales will be discontinued after October 6.

A telegram received October 7, 1897, from Minister Hart, of Bogotá, says, in part:

By decree just communicated, Colombia prohibits and confiscates after 8th instant importation of matches, common and amorphous, phosphorous sticks of wood or wax, pasteboard boxes, and pasteboard for making such boxes. Representation of injustice to unadvised exporters unavailing.

TWINE AND ROPE IN URUGUAY.

I have the honor to submit the following report, in answer to various inquiries made about the imports of twine and rope into Uruguay.

Imports of twines and cords of the agave or aloe plant.

Countries of origin.	Quantity.		Value.
	*Kilograms.**	*Pounds.*	
Italy	46,569	58,580	$8,017
United States	10,071	22,202	6,396
England	8,911	19,645	2,261
Belgium	2,408	5,308	1,089
Spain	1,288	2,839	644
Germany	586	1,291	293
France	400	881	200
Argentine Republic	60	130	30
Total	50,293	110,876	18,930

*1 kilogram=2.2046 pounds.

The duty on the above is 31 per cent, 5 per cent, and 2½ per cent on a valuation averaging from 50 to 76 cents per kilogram.

The imports of twines and cords of hemp from England amounted to 220 kilograms (485 pounds), valued at $110.

Imports of rope in general.

Countries of origin.	Quantity.		Value.
	Kilograms.	*Pounds.*	
Italy	139,728	308,044	$30,515
England	155,281	342,332	28,490
United States	45,081	99,385	9,032
Germany	21,969	48,432	4,129
Belgium	20,007	44,107	3,860
France	8,950	19,731	1,963
Argentine Republic	4,433	9,762	723
Spain	622	1,370	137
Total	396,071	873,163	78,849

The duty on the above is 31 per cent, 5 per cent, and 2½ per cent on a valuation of manila at 21 cents per kilogram, and lesser qualities at from 15 to 19 cents per kilogram. This does not include so-called machine twine, used for harvesting purposes. The latter article is entirely separate from the ones named above, on account of being under a different tariff schedule. The quantity of this article imported from the United States alone in 1896 was 467,871 kilograms (1,031,469 pounds), valued at $149,718.72. The duty is, on a valuation of 32 cents per kilogram, 5 per cent and 2½ per cent.

EDGAR SCHRAMM,

MONTEVIDEO, *July 3, 1897.* *Consul.*

NICARAGUA: TRANSPORTATION CONTRACTS AND TRADE.

ATLAS STEAMSHIP COMPANY'S CONTRACT.

In consequence of an arrangement under which the Atlas Steamship Company is to carry all the coffee shipped from San Juan del Norte, the Royal Mail Steam Packet Company—whose steamships have for many years called here every twenty-eight days—has discontinued sending its vessels to this port (San Juan del Norte). An Atlas boat arrives at San Juan del Norte every fourteen days from New York, and all European freight which was formerly carried by the Royal Mail boats is now carried by the Atlas vessels via New York.

During the year ended June 30, 1896, the exports to Europe, consisting principally of coffee, hides, and deerskins, were as follows, in United States currency: To France, $34,338.19; to Germany, $344,510.54; to Great Britain, $137,419.20; total, $516,267.93.

In a former communication to the Department, I reported that the Atlas Company had dispatched an agent to Nicaragua with instructions to make a report upon the navigation of the San Juan River, and that the company contemplated the purchase of the steamboats on the San Juan River and Lake Nicaragua to be run in connection with its steamship line. The agent's report seems to have been favorable, as he returned to Nicaragua with instructions to enter into a contract with the Nicaraguan Government. The contract was signed June 5, 1897; I inclose a copy of it.

The exports and imports of western Nicaragua are estimated at 50,000 tons annually, of which about 40,000 tons have been shipped via Panama and 10,000 tons via San Juan del Norte. It is expected that an earnest effort to capture this trade will result in giving the San Juan River route at least 25,000 or 30,000 tons annually.

At present, all the steamboats on the San Juan River and Lake Nicaragua are owned by Mr. F. A. Pellas, an Italian subject residing at San Juan del Norte. Mr. Pellas has held his steamboat property, including the machine shop which formerly belonged to the Maritime Canal Company of Nicaragua, at from $175,000 to $210,000 (gold); but I have not been able to learn the terms upon which he is to sell to the Atlas Company.

The constitution of 1893 provides that there shall be no monopolies; but paragraphs 1, 2, and 3 of the contract just made with the Atlas Company grants exclusive rights which would seem to be monopolistic in their scope—(1) that the company shall have the exclusive right for thirty years to navigate by steam the Silico Lagoon; (2) that for the same period, it shall have the exclusive right to construct tramways and railways along the route (San Juan River route) wherever convenient, in order to avoid obstacles in the San Juan River; (3) that the Government shall not grant subsidies to any other steamship line on Lake Nicaragua for thirty years.

For several years, boats have not been able to navigate the lower San Juan for from four to six months in the year. During such seasons, the boats run to the mouth of the Colorado, a distance of from 15 to 18 miles from San Juan del Norte, and all freight and passengers must be carried by sea in tugs and lighters between the two places. The transfers of freight not only necessitate considerable expense, but there are many times when the trips can not be made, owing to wind, weather, and the dangerous bars.

It is believed that the construction of a narrow-gauge railway, not exceeding 5 miles in length, from the upper end of Silico Lagoon to where the Colorado leaves the San Juan, known as Colorado Junction, will entirely do away with the necessity of sending boats to the mouth of the Colorado, as there is deep water the year round in the inside passages between San Juan del Norte and Silico Lagoon, a distance of about 13 miles. Mr. Wichmann, the agent, says that the Atlas Company will probably build two or three new boats for the river and one for the lake, and that new lighters and other accessories will be purchased. This, however, may not be done for several months. As the Atlas Company is an English corporation, it is likely that the new boats and the materials and supplies for the railway will be purchased in England; but our people might be able to make figures that would interest the company. Both of the tugs in this harbor were built in the United States in 1895—one for Mr. Pellas, an Italian, and the other for Messrs. H. F. Bingham and E. L. D'Souza, British subjects—and built there presumably because the prices compared favorably with English prices. If we can build tugs for this country, there would seem to be no good reason why we can

not successfully compete with Great Britain for a share of the materials required by the Atlas Company at San Juan del Norte if it should be willing to buy from us. Pim, Forwood & Kellock, 24 State street, New York, are agents for the Atlas Company.

THOMAS O'HARA,
SAN JUAN DEL NORTE, *June 24, 1897.* *Consul.*

CONTRACT OF THE ATLAS STEAMSHIP COMPANY.

* * * * * * *

(1) The Government, in consideration of the heavy outlay which the Atlas Steamship Company, Limited, hereinafter called "the company," may incur to accomplish that purpose, grants it the exclusive right to navigate by steam on the Silico Lagoon for thirty years to commence from the final approval of this agreement, and also the exclusive right for the same period to construct tramways and railroads along the route wherever convenient, in order to avoid the obstacles of the San Juan River.

(2) The company obligates itself to construct for its account a narrow-gauge railway to connect the Silico Lagoon with the San Juan River at a point called Colorado Junction or its vicinity, thereby avoiding the most difficult and the dryest part of the San Juan River and facilitating transportation to the port of San Juan del Norte. The length of this line will be, more or less, 5 miles, and at its terminals the company shall have houses and wharves to meet the traffic or as the traffic may warrant.

(3) The Government will give the company a subsidy of $5,000 in national currency ($2,340 in United States currency) for every mile of said railway, payable monthly in consecutive payments of $1,000 ($468 in United States currency), from the day that the governor intendant of San Juan del Norte shall give notice that construction on the line has been commenced; and it is understood that the work is not to be interrupted, for in such case payments shall cease and not be renewed until after the commencement again of such work.

(4) The Government will declare the work one of public benefit, so that the company may appropriate private lands required for the road in accordance with the laws on that subject. The company shall have the right to use for that purpose, without any remuneration, the national lands along the line and a tract of land 100 varas (107.9834 yards) wide running the entire length of the line, on the conditions before mentioned.

(5) The Government also gives the company the right to cut in the national forests adjacent to Lake Nicaragua and San Juan River all the wood necessary for the use of the steamers, tramways, railroads, wharves, houses, workshops, and other purposes in connection with the traffic without cost.

(6) The Government grants the company the right to occupy in the ports and along the route the lots of national lands necessary for the establishment of warehouses, tramways, offices, workshops, stations, etc. It is understood that the lots are to be selected in accordance with the laws of the Government, and, in case any of them should be private property and no terms can be made with the respective owners, the Government will authorize the appropriation of such lots, the same to be paid for according to an appraisement by experts.

(7) The employees and workmen of the company shall be exempt from civil and military duties, to which effect the corresponding authorities shall issue the necessary orders in behalf of those needed for the good service of the company.

(8) The steamers, railroads, tramways, stations, workshops, houses, and other objects indispensable for the use of the company shall be free from all national and municipal taxes during the term of this contract.

(9) The company may import free of customs and local duties the machinery, implements, materials, coal, provisions, and other articles necessary for its service, excepting strong liquors, being subject to the fiscal regulations and dispositions of the Treasury Department for the control of high spirits and statistics.

(10) The company shall have free use of the national telegraph lines for business matters in connection with its service.

(11) Upon the completion of the Silico Railway, the Government, if it shall be to the interest of both parties, may transfer the Castillo custom-house to a point most suitable and convenient for the dispatch of merchandise so as to occasion the least possible delay.

(12) The company obliges itself to make at least three trips a month from Granada to San Juan del Norte, and vice versa, and stop once a month at the open ports of the lake where there is sufficient water for the steamer *Victoria* or any other boat of its size. The company shall carry the Government mails without any remuneration. The trips alluded to shall be subject to a time-table, of which notice is to be given to the Government and public, and can not be changed without three months' notice. For every unjustifiable infringement of the time-table, the company is liable to a fine of from $25 to $100 ($11.70 to $46.80 in United States currency).

(13) The rates in the passenger and freight tariffs must be expressed in the national currency and be as reasonable as the expenses of the enterprise will permit. The Government will be entitled to a rebate of 30 per cent on the fares of its employees and other persons traveling for its account, and to a reduction of 50 per cent on freight and on the transportation of troops.

(14) In case of war, the steamers of the company shall be placed at the disposal of the Government, which will run them for its account, and on returning them shall pay all damages to the steamers, and shall recompense the company for all losses sustained while the steamers were in the possession of the Government. The damages and compensation shall be appraised by an engineer appointed by mutual consent or by two experts, each party appointing one. At the same time, a third one is to be appointed by the two experts, whose decision will be final in case of a disagreement.

(15) The company binds itself as far as possible to undertake works of improvement on the San Juan River along its whole course with the object of securing uninterrupted traffic during the whole year. If the works to be undertaken for that purpose are of such an extent as to call for a very large outlay, the Government may make new concessions to the company in view of the surveys and previous estimates presented by them and on condition that the improvements of the river secure 6 feet of water in its shallowest places and the bar to afford access to steamers of high tonnage and deep draft.

(16) The present contract may be transferred to any private party or foreign company, but by no means to a government either wholly or in parts, directly or indirectly. In case it shall be transferred to a company having its seat abroad, it shall keep a representative in Nicaragua with full instructions and power to transact any judicial and extrajudicial business, the company being subject to the laws of the State of Nicaragua.

(17) The company shall keep an agent in Nicaragua to give effect to the foregoing clauses. Differences which may arise with regard to the interpretation and application of this contract shall be adjusted by a board of arbitration to be organized in the manner established in article 14. The tribunal of arbitration shall be established at the latest a fortnight after notification has been given by the other

party that such tribunal is needed to settle a disputed question, and the decision, which is to be final, must be rendered at least six months from such time.

(18) If the railroad from the Silico Lagoon to the San Juan River shall not be finished three years after this date, that of itself shall be a forfeiture of this concession. The work for the construction of such railway must commence within a year, at the latest, after signing this agreement, and in case it shall fail to do so, the company shall forfeit the deposit of $5,000 (gold) which it is obliged to make in the general treasury of the State within six months on pain of forfeiting this contract. This deposit shall be returned to the company after the work on the railroad in question has been finished.

(19) This concession shall never be an obstacle to the carrying out of the contracts the Government may make for the opening of an international canal on the same line, nor shall it in the least affect those already in force.

(20) It is understood that the Government can not grant subsidies to any other steamship line which may be established on Lake Nicaragua during the term of this agreement.

NICARAGUA AND THE SAN JUAN RIVER.

A public meeting was held here (San Juan del Norte) yesterday to protest against the promulgation by Costa Rica of the following decree in so far as it relates to the San Juan River:

The Constitutional Congress of the Republic of Costa Rica, considering that the valleys of San Carlos and Sarapiqui are of great importance, owing to the fertility of their soils, which produce coffee, cacao, rubber, and all classes of cereals, and it being but just to promote the progress of all these regions and stimulate their inhabitants with all the facilities that can be afforded to them, whether by the introduction of merchandise most necessary for their uses or by the exportation of their products, decrees:

ARTICLE 1. To allow the importation by the San Juan and Colorado rivers of the following merchandise: Lumber for building purposes, corrugated and sheet iron, wire for fences, nails of all kinds, machinery for agricultural purposes and general industries, all sorts of cordage, ordinary shoes, cotton and hemp goods, tar, petroleum, candles, common hats, empty sacks, common hardware, ready-made clothes (outer and under wear) for laborers, waterproof suits, and cereals; and the exportation of the products of San Carlos, Sarapiqui, Parismina, Tortuguero, and Colorado.

ART. 2. To allow the introduction free from the customs tariff duties of the following named goods: Machinery and instruments for agricultural and general industrial purposes, materials for the construction of railways, lumber for building purposes, corrugated and sheet iron, nails of all kinds, and the ordinary hardware destined for these places.

ART. 3. The Executive power will enforce such necessary measures as shall be deemed proper for the protection of the fiscal interests.

An editorial protest appeared July 1 in El Comercio, a newspaper published in Managua, the writer maintaining that Costa Rica has no right to legislate regarding the San Juan River, as "Nicaragua has exclusive dominion over the waters of the San Juan River."

The meeting held here yesterday was attended solely by Nicaraguans. A written protest was circulated and received thirty-eight

signatures. For about 79 miles from its mouth, the San Juan flows between the two countries. The San Carlos empties into the San Juan about 53 miles above San Juan del Norte, and the Sarapiqui several miles below the San Carlos.

As Costa Rica is conceded for purposes of commerce to have as much right as Nicaragua to navigate the San Juan from its mouth to a point about 26 miles above the mouth of the San Carlos, and as Costa Rican importations by way of San Juan del Norte are not subject to the payment of duties in Nicaragua, it is not improbable that in making the decree in question the Government of Costa Rica intended neither to declare hostility toward Nicaragua nor to exercise dominion over the San Juan River.

THOMAS O'HARA,

SAN JUAN DEL NORTE, *July 12, 1897.* *Consul.*

AGRICULTURE IN SOUTHERN NICARAGUA.

POPULATION.

The population of all the territory lying between the Rama and San Juan rivers and east of a line drawn from the source of the Rama to the mouth of the San Carlos, embracing about 2,200 square miles, does not exceed 1,500. According to the census of March, 1897, the town of San Juan del Norte has a population of 1,156, and the so-called city of America a population of 38, which leaves a rural population in the territory mentioned of but 306. The country surrounding San Juan del Norte is virtually a wilderness. There are no wagon roads in the 2,200 square miles of territory, with the exception of a cart track leading from San Juan del Norte to the Rio Indio, a river emptying into the sea a few miles northwest of the town.

CATTLE, SWINE, ETC.

A strip of grazing land from one-third to three-fourths of a mile wide extends along the beach from San Juan del Norte to a point 8 or 10 miles northwest of the town. On the eastern edge of the town is a tract of about 150 acres of grazing land. Dairy and beef cattle are pastured on these lands. About 300 head of cattle are killed per annum for the local market. Cattle have nothing but grass, corn and oats being fed only to horses. There are no sheep and but few pigs.

Turkeys, ducks, and geese do not thrive well. Chickens are scarce and expensive. Eggs sell for 80 to 100 centavos (37.44 to 46.8 cents in United States currency) per dozen and chickens for 100 to

to 125 centavos (46.8 to 58.5 cents in United States currency) each. Other prices are as follows:

Description.	Nicaraguan currency.	United States currency.
Beef.....per pound...	$0.20 to $0.30	$0.0936 to $0.1404
Pork.....do.....	.20	.0936
Fresh fish.....do.....	.10 to .20	.0438 to .0936
Domestic butter.....do.....	.75 to .80	.351 to .3744
Domestic cheese.....do.....	.60	.2808
Milk.....per bottle (½ gallon)...	.20	.0936

Domestic lard is not sold.

No cattle, swine, poultry, fish, or dairy products are exported.

FRUITS AND VEGETABLES.

The following fruits and vegetables are grown in the town and on a few small clearings on the Indio and San Juan rivers: Oranges, lemons, limes, cocoanuts, pineapples, guavas, mangoes, star apples, bread fruit, plantains, bananas, alligator pears, marañones, pijiballes, pipianes, quiquisque, okra, yams, yuca, cacao, and red peppers. Cucumbers, radishes, lettuce, spinach, tomatoes, and pumpkins are occasionally grown; but it is almost impossible to successfully cultivate them, owing to the ravages of ants and other insects. Cabbages, carrots, turnips, beets, green corn, and potatoes are imported from Costa Rica. Potatoes also come from the United States. Watermelons are imported from New Orleans and the island of San Andreas and apples and California grapes, and occasionally pears, from New York and New Orleans. Beans (frijoles) and corn come from the interior. Small quantities of corn are also imported from the United States; also oats. All the imported lard is from the United States. Tub butter and oleomargarine are imported from the United States and canned butter from Cork, Copenhagen, and the United States, the best butter coming from Copenhagen.

COCOANUTS.

For several years, small vessels engaged in the cocoanut trade called regularly at San Juan del Norte during the months of April, May, June, and September, and cocoanuts were carried out to them in canoes. There was but little profit in the industry for the shippers, as many nuts were lost by the upsetting of the canoes, and it was less trouble to return to the beach for fresh cargoes than to pick up the floating nuts.

The most extensive "cocoanut walk," or "cocal," on this coast is known as "Kirkland's Walk," deriving its name, according to ex-Consul William A. Brown, from an American who at that place

made the first attempt on this coast to establish a cocoanut plantation, availing himself of a cargo of cocoanuts drifted ashore from a wrecked schooner. Ex-Governor Sacasa, of San Juan del Norte, now claims to be the owner of this walk. It commences at the mouth of the Rio Indio and extends north along the beach a distance of 20 miles. Its width is from 500 to 600 feet, and it is entirely covered with bearing cocoanut trees.

In his report published in the March, 1887, number of CONSULAR REPORTS (No. 75, p. 664), Mr. Brown says:

> The cocoanuts from "Kirkland's Walk" are very large, and have good reputation with the importers of that product in the New York market. This, I am told, is not only because of the large size of the nuts, but because they can be manipulated more economically than the ordinary nut. The meat can be removed from the shell by merely cracking it, and in this way it is usual to secure an unbroken sphere of the meat, whereas, with the ordinary nut consumed in manufacturing trade, the meat has to be picked off the shell by the use of machinery.

Mr. Brown estimated the annual production of cocoanuts in this consular district at 1,500,000, comparatively few of which, however, were shipped.

Since January 1, 1892, cocoanuts have been shipped from San Juan del Norte as follows:

Year.	Quantity.	Value in United States currency.
	Bags.	
1892	1,054	$1,346.00
1893	1,186	1,749.62
1894	578	1,295.00
1895	540	622.40
Total	3,358	5,012.42

No cocoanuts have been shipped from the port since September, 1895. As already stated, it was found unprofitable to ship them in schooners which anchored off the "walk," and it costs too much to cart them to town to be shipped by steamer. A few of the nuts are fed to pigs and a few are used by natives, who extract the oil from the meat and use it as a substitute for lard; but most of them go to waste.

EXPORTS.

With the exception of the cocoanuts mentioned and 50 pounds of cacao invoiced at $5.50 (United States currency), not a single product of local growth has been shipped from San Juan del Norte since January 1, 1892. The exports from the port all come from the interior of the country via the San Juan River.

AGRICULTURAL IMPLEMENTS.

Agricultural implements of modern make are used to some extent on the plantations along the Bluefields River; but in the country tributary to San Juan del Norte the only agricultural implements employed are machetes, grub hoes, axes, hatchets, spades, shovels, and heavy iron rakes. These implements are imported from the United States, England, and Germany. The machete is the principal farm implement, the natives using machetes for cutting trees and underbrush and breaking the soil for crops. Plows, harrows, cultivators, etc., are unknown. Three bundles of harrows were imported from the United States in 1895, but were for the interior of the country.

There is but one farm wagon and one buggy or carriage in the vicinity of San Juan del Norte. The wagon is extremely heavy, has but two wheels, and is drawn by oxen. It was made in the United States. It is used for hauling supplies to the cabins on the grazing lands north of the town, and once or twice a week is loaded with grass to be sold in San Juan del Norte. The grass is made up into little bundles something like wheat sheaves and is peddled about the town.

THOMAS O'HARA,

SAN JUAN DEL NORTE, *June 30, 1897.* *Consul.*

FAILURE OF CROPS IN RUSSIA.

The crops over an extensive area in this country have this year proved a failure. The causes which led to this condition of things began in the month of December, 1896, when serious doubts were entertained concerning the safety of winter-sown grain, notably winter wheat. The season had been a very dry one, and there was a great scarcity of snow. In many winter-wheat districts, there was none at all. The result of this was the failure of about half of the wheat sown. The spring was a favorable one, and much of this area was resown, and it was hoped that a more or less satisfactory yield would be the result. Generally speaking, the appearance of spring-sown grain, such as barley, rye, oats, etc., was more satisfactory than that of wheat; nevertheless, the prospects for a good crop all around were favorable almost up to cutting time.

The season from April to August in this southern country is usually a very dry one, and the crops are apt to suffer. This year, however, was the wettest season ever known here, and in many districts the rain and hail completely destroyed the ripe and unripe grain. In many places, the grain was not cut at all, and in others,

it was cut with mowers, reapers, and scythes. In the best of the fields, harvesters and binders were used; but this was not the case in a large area, as the grain was not worth the expense of binding. Samples of new wheat sent here are very inferior in quality and weight. The yield is from 4 to 6 bushels to the acre for the standard varieties of both winter and spring wheat. The samples of barley sent here show much discoloration and are under weight. Rye is much damaged, and it will be under an average crop. The reports concerning oats are conflicting, but on the whole may be taken as favorable to an average crop. But little wheat will be exported from Russia during the season of 1897–98, for the simple reason that there is but little available for export. The old stocks are practically exhausted, and the new crop, after supplying the home demand, will not be large. The failure of the wheat crop in Austria-Hungary, Roumania, and Bulgaria has brought buyers from those countries into Russia, and the wheat which ordinarily would leave this port by steamer is now destined to go by rail from the interior to the countries named, with the exception of a small quantity which will be sent to Bulgarian ports on the Black Sea. How much of this cereal (wheat) Russia can afford to let go, is a question which is being discussed even now, and hints are thrown out that the export of certain cereals may be altogether prohibited. These reports, it may be stated, have not the slightest foundation in fact. Russia will never again be led into such an error. The country is still suffering from the effects of the last prohibition, and will continue to feel it for years. The idea prevailed that Russian wheat was an absolute necessity in the markets of the world. The action of the Russian Government in prohibiting the export of wheat during the famine year has taught that the markets of the world, in case of necessity, can do without Russian wheat altogether.

THOS. E. HEENAN,

ODESSA, *August 9, 1897.* *Consul.*

THE WHEAT HARVEST IN FRANCE IN 1897.

According to the reports transmitted by the prefects of the several departments to the Government, the production of wheat in France for the year 1897 was 88,556,890 hectoliters (251,324,353 bushels), against 119,742,416 hectoliters (339,828,976 bushels) in 1896 and 119,967,745 hectoliters (340,468,459 bushels) in 1895.

The sowing was hindered in a great measure by the heavy rains of autumn and spring, and the surface devoted to the raising of

wheat was 6,544,860 hectares (16,172,349 acres), against 6,870,352 hectares (16,986,639 acres) of last year and 7,001,669 hectares (17,301,123 acres) in 1895. The harvest of maslin (mixed wheat and rye) was 3,219,650 hectoliters (9,137,366 bushels), against 4,130,481 hectoliters (11,722,305 bushels) in 1896; and that of rye, 17,564,050 hectoliters (49,850,773 bushels), while the crop of last year amounted to 24,464,730 hectoliters (69,430,903 bushels).

The Marché Français, a journal devoted to the flour industry, estimates the returns for the year 1897 to be 88,120,840 hectoliters (250,086,943 bushels), as against 125,049,420 hectoliters (354,890,253 bushels) for 1896, showing a decrease of 36,928,580 hectoliters (104,803,310 bushels).

The estimate according to districts is as follows:

Districts.	1897.	1896.
	*Hectoliters.**	*Hectoliters.**
Northwest	11,213,210	13,795,020
North	25,319,690	32,671,770
Northeast	6,771,790	10,949,450
West	12,666,630	18,254,410
Center	8,392,650	15,383,540
East	8,190,110	12,841,850
Southwest	6,282,270	10,338,790
South	3,962,910	5,554,330
Southeast	5,206,080	5,105,160
Corsica	115,500	135,100
Total	88,120,840	125,029,420

* 1 hectoliter = 2.838 bushels.

The number of hectares sown was 6,294,490 (15,553,684 acres), against 6,268,400 (15,489,210 acres) in the preceding year, or a decrease of 26,090 hectares (64,474 acres).

HILARY S. BRUNOT,

ST. ETIENNE, *September 15, 1897.* *Consul.*

CROPS IN SICILY AND CALABRIA.

The Agricoltore Calabro-Siculo, of Catania, a semimonthly agricultural journal, publishes on August 15 information obtained (in response to inquiry made by that journal) from reliable subscribers and correspondents in various regions of Sicily and Calabria, showing what this year's crops of wheat, almonds, grapes, and olives will be.

In designating the quantity of the crops expected to be gathered, the following terms were adopted: "Excellent, good, middling, scarce, and very scarce." The average of a crop has been estab-

lished as 100; excellent, as 130 to 150 per cent of an average crop; good, as 105 to 130 per cent of an average crop; middling, the average crop, as before stated, placed at 100; scarce, a crop which will be from one-third to one-half less than average; very scarce, a crop which will fall below one-half of the average.

Observing these terms, the following table will give a fair idea of the crops expected to be gathered of the products above stated in the various provinces of Sicily and Calabria:

Provinces.	Wheat.	Almonds.	Grapes.	Olives.
Sicily.				
Palermo	Scarce	Scarce	Middling	Scarce.
Messina	Very scarce	do	do	Do.
Catania	Scarce	Middling	do	Do.
Trapani	do	Scarce	do	Do.
Siracusa	Very scarce	Excellent	Good	Do.
Girgenti	Scarce	Scarce	do	Very scarce.
Caltanissetta	Very scarce	Good	do	Scarce.
Calabria (southern Italy.)				
R. Calabria	Excellent	Scarce	Good	Good.
Catanzaro	Scarce	do	do	Do.
Cosenza	do	do	do	Do.

LOUIS H. BRÜHL,
CATANIA, *August 24, 1897.* *Consul.*

REDUCED COTTON CROP IN INDIA.

Knowing the importance to the cotton growers of the United States and those interested in the price of cotton of ascertaining the prospects of the growing crops in India, as the price in the United States is often materially affected by the conditions of the crop here, I addressed a note to the director-general of statistics for India requesting such information as he could give at this early season of the growing crop, the areas sown compared with previous years, its present condition, etc., and am in receipt of his "First general memorandum of the prospects of the cotton crop of the season 1897," dated the 24th instant. It is shown by this memorandum that, in the Deccan districts, where the early crop is grown, the area sown is estimated at about 38 per cent below the average, though the reports are incomplete, and the season so far has been unfavorable.

In the Madras districts, the first sowings were limited to an area of 32,000 acres, while the average of the preceding five years was as much as 120,000 acres; but later sowings make the decrease only about 27 per cent.

In Berar, a large cotton-growing district, the area sown is estimated to be about half the average, sowings having been retarded owing to want of rain; but prospects have improved with the recent rains, and the crop is reported in a fair condition.

In the Central Provinces, the monsoon was late and the rains markedly deficient at the time of sowing, and there was some loss in germination. Besides, in these provinces, there has been a tendency to grow food crops in preference to cotton, in order to replenish diminished stock; and the area sown in cotton is about 3 per cent less than the area sown last year, but this is not a large cotton district.

In the Northwestern Provinces and Oudh, the area sown is estimated to be about 15 per cent less than the average, the decline being due partly to scanty rain at the beginning of the season and partly to extensive sowings of food crops to replenish exhausted stocks. The crop is reported to have been in a flourishing condition on the 10th instant, and the season has been favorable since.

In the Punjab district, the area sown is estimated at 1,158,200 acres, which is little less than the area finally reported last year. The crop is in fair condition, having been much impaired by the recent rains.

The Guzerat and Sind districts, which are large cotton-growing districts, are not mentioned officially; but unofficial reports give reduced areas in cotton in both.

I have had the official reports and best unofficial information gone over by competent experts, and the deductions are, taking the area sown in cotton throughout India and the present condition of the crop, that they point to a yield of about 25 per cent less than the crop of last year. Of course, much depends upon the season from now on.

R. F. PATTERSON,
Consul-General.

CALCUTTA, *August 30, 1897.*

RAILWAYS IN CHINA.

I have the honor to inform you that Hu Yünmei, governor of Shun-Tien-Fu (Peking) and acting vice-president of the board of censors, has been appointed by imperial edict to take charge of the Tientsin-Shanhaikuan Railway, together with the extension beyond the Great Wall at Shanhaikuan to Kirin and Moukden, in Manchuria.

This change in the administration of the railways is partially due to the fact that Hu has so successfully and economically superintended the construction of the Tientsin-Lu Kou Chiao extension.

Director-General Hu is known to lean towards Great Britain. His appointment to build the Manchurian lines, which, of course, involves the raising of a loan, is therefore significant, as these lines will naturally have close connection with the Trans-Siberian Railway.

It is not difficult to imagine that the object of this move is to enlist British capital in northern China in order to weaken the influence of Russia in that quarter, just as British influence has been weakened in central China by the Belgian loan negotiated by Sheng-Taotai, the former director of this railroad. It is generally believed that Belgium is the agent for Russia in the matter of the Belgian loan negotiated for the building of the Lu-Han (Lu Kou Chiao-Hankow) Railway.

SHERIDAN P. READ,

TIENTSIN, *August 19, 1897.* *Consul.*

Consul Read writes from Tientsin, under date of August 27, 1897, substantially as follows: The representative of the American syndicate that so nearly secured the contract for building the railroad from Lu-Kou-Chiao to Hankow passed through here on the 24th instant on his way to Peking. It is his intention to see the newly appointed director-general of the Tientsin-Shanhaikuan line with reference to the extension of this line to Moukden and Kirin.

I have reason to believe, however, from a recent conversation with Wang Taotai, the new managing director of this line, that the intention is to extend the road by degrees from the earnings of the present line, and not make any loans. Wang also added that, while the Chinese favor the use of United States capital and are predisposed toward us as a nation having no territorial designs, they can not avail themselves of our proffered loans, on account of the extreme legal severity with which our people draw up their contracts and the exacting intricacies in which the main issues are involved. This rigorous method of drawing up contracts is confusing to the Chinese, who want few and simple terms and are so liberal in fulfilling their part of a simply drawn business contract that the contingencies against which we guard ourselves by exacting clauses are not only unnecessary, but arouse their suspicion and alarm. Europeans have a better idea how to approach the Chinese. Understanding their character more fully, they are willing to take much for granted; and when hitches or complications arise, they find that adjustments can be made more easily than could be done if the remedies or penalties were anticipated on paper.

While on the subject of railroad matters, I wish to state that it is the intention of the Chinese Government, upon the completion of

the Lu-Kou-Chiao–Hankow line, to build a road from Paoting-fu, the capital of this province, to Tai Yuen-fu, the capital of the province of Shansi. About 120 miles west of Paoting-fu, there is a rich coal and iron district, which it is the object of the contemplated railroad to develop. This line will be of importance to foreigners, as it will open for the consumption of foreign commodities (such as kerosene, cotton goods, etc.) the whole of the Fen Valley from Tai Yuen-fu to Tung-Kwan, on the Yellow River, at which place this trade route crosses the river on its way to Si-gnan-fu, the capital of Shensi province. The road will tend to revive the grain industry of Shansi, the province known in olden times as the "granary of the Empire." Shansi is still in a paralyzed state as the result of the Tai-Ping rebellion and the widespread devastation by famine in 1877–78, from which the natives have made no efforts to arouse themselves. Once the loess barrier* between the provinces of Chihli and Shansi is broken by a railroad, this part of China will be brought in touch with the outside world, and the results will be more important than the Chinese themselves imagine. The provinces to the west are rich in raw materials, such as wool, skins, etc. Even now the customs returns show how large the exports to Europe and America are. With railways laid along the natural trade routes that have been established for centuries, I believe that China will become a most dangerous competitor in the supply of raw material to the great manufacturing centers of the world.

I do not think that China will ever become an exporter of manufactured goods. The Chinese lack in a certain power of imagination, and, although they are becoming users of machinery, they can not invent what is necessary for continually developing requirements.

TRADE CONDITIONS IN PEKING.

I have the honor to report that the near approach of the completion of the Peking-Tientsin Railroad has caused foreigners in North China to turn their attention to trade possibilities in Peking.

There already exist in Peking, although it is not a treaty port, three general stores and one hotel under foreign control. Several more foreign stores and two new hotels (one to replace the old) will soon be in existence, and the knowledge of this fact has led me to

*The loess seems to be a clay with a large admixture of sand, which has filled up the valleys throughout Shansi and Shensi. Richthofen, I understand, says that the peculiar formation in steppes with perpendicular sides (even the roads in this region are worn down in places as much as 50 or 75 feet perpendicularly) is due to the aerial influences and not to erosion. Little rain falls in these provinces; in Shansi, not a drop fell during 1876-1878, which resulted in one of the greatest famines of modern times.

make an investigation as to the conditions under which trade in Peking is conducted.

A number of years ago, Messrs. L. Tallieu & Co., a Swiss firm, obtained through the French legation (which has charge of Swiss interests) the permission of the Chinese Government to open a store. It was supposed that this store was to exist only as a convenience to foreigners residing at the capital, but no objection has since been made to the extension of its trade among the Chinese.

The privilege granted to Messrs. L. Tallieu & Co. was soon demanded by others, who were reluctant to allow this firm to monopolize the trade with the Chinese. The goods imported by these firms are admitted free of duty into Peking by means of passes issued by the Taotai at this port, upon the requisition of the respective consuls, as goods for foreign consumption in the interior need pay but the one duty levied at the treaty port of entry. The goods thus procured by the foreign merchants when disposed of to the Chinese escape the duty which the Chinese importer must pay. Sales with the Chinese, therefore, have become profitable, as the foreigner trades from a vantage ground. The Chinese authorities, although aware of this covert trade, are loath to prohibit it, and the foreigners are naturally keen to extend it.

Although I should like to see a general store in Peking under American management, I feel that I can not conscientiously encourage the establishment of such a store, as it would not be profitable, considering the limited number of foreign buyers, unless sales were made to the Chinese under the same conditions as are now adopted by others.

On the other hand, should a foreigner import openly for the Chinese and pay such duties as the Chinese importer must pay, such a business would soon be prohibited as being contrary to treaty, since Peking is not a treaty port.

In view, therefore, of the strong tendency of foreigners to establish themselves in Peking and of the attitude of the Chinese authorities themselves towards this trade, the time has come, in my opinion, when the question of including Peking in the list of treaty ports, open alike to all nationalities for the purposes of general trade and the purchase of property, deserves consideration.

SHERIDAN P. READ,
Consul.

TIENTSIN, *August 10, 1897.*

DISCRIMINATING DUTIES IN FRANCE.

Noting the interest taken in the construction of section 22 of the act of July entitled "An act to provide revenue, etc.," and being most earnestly convinced not only of the legality, but of the sound policy and importance, of the discriminating duties imposed by this section upon goods coming into the United States through a country other than the country where they are produced, I desire to call your attention to an instance of exactly parallel legislation to which I have seen no reference made in the discussion of this subject which has been in effect some years, and to which, so far as I am aware, no objection has been offered by other nations.

The questions arising, as I gather from various sources, under section 22 of the tariff act of 1897 are:

(1) Whether the United States can impose an additional tax on the products of a country holding by convention the position of "the most-favored nation" which come into her territory through the ports of another country, also, perhaps, having "the most-favored-nation" provision in its treaties?

(2) Whether such a discriminating duty can be laid on the products of a "most-favored nation" imported in vessels not of the United States or of any nation having by treaty a right to import goods on the same terms as are imposed on goods in United States bottoms?

The first of these questions seems to me to have been conclusively settled by the action of the French Government in imposing what are termed "surtaxes" on the products of all countries which are imported into France through another country or in ships touching at other ports on their way from the country of origin to a French port, and the concurrence therein of all nations of the world for some years.

The French tariff on imports imposes two rates of duties on all articles: (1) The maximum, which is the rate charged on all products coming from countries whose treaties with France do not contain the "most-favored-nation" clause; (2) the minimum rate, which is granted only to the products of nations having the "most-favored-nation" clause in their commercial treaties.

In addition to this, however, the French Government levies what are known as "surtaxes," of which there are two classes, each of which is set forth in a distinct schedule in the law of January 22, 1892, article 2, which I translate as follows:

Products of extra-European origin imported from a country of Europe (this is construed by the customs department to mean in a ship coming from a European

port, and was no doubt so intended) are subject to the surtaxes (that is, duties additional to the tariff duties) specified in Table A.

European products imported from other countries than the country of origin, shall pay the surtaxes specified in Table C annexed to this act.

Foreign sugars shall continue to pay the surtaxes established by the laws of July 19, 1880, and August 5, 1890.

It is the first two of these classes that have a special bearing on the present subject. They were no doubt intended especially to build up and encourage direct trade with France and are exactly analogous in character to the discrimination made in the act of July 24, 1897, against goods produced in noncontiguous countries imported into the United States through contiguous countries. The first of these, the surtaxes imposed by which are in the main larger than those of the second class, discriminates especially against indirect trade with non-European countries. It refers alike to the products of the most-favored and the least-favored countries and to importation through the ports of either.

Under its provisions, an American manufacturer shipping goods by the American line to Southampton or the German line to Hamburg, and thence to any French port, would have to pay at least 70 cents for every 220 pounds more than if he shipped from New York by the Bordeaux line plying direct to this port. On many articles the surtax would be much more. Thus bronzes indirectly imported or coming through a foreign port would have to pay $7.70 per 100 kilograms of 220 pounds more than if shipped direct to a French port, and enameled ware $9.65 more. It matters not whether the goods are transshipped or not, nor whether the port at which a ship touches is that of a "most-favored nation" or not.

Surtaxes have been imposed by the French Government ever since 1863.

I send herewith a copy of Table A of the law of January 14, 1893, marked "Exhibit A." I would also give a copy of Table D, applying to European products imported through another European nation, but have not the means at hand enabling me to do so.

* * * * * * *

I would also beg leave to suggest that this difference between the cost of direct and indirect importation of American products into France is one that should be made known to American shippers.

ALBION W. TOURGÉE,

BORDEAUX, *September 4, 1897.* *Consul.*

EXHIBIT A.—LAW OF JANUARY 14, 1892.

[Translation.]

List C.—Surtaxes to be applied to products of non-European origin when imported from a country of Europe.

Articles.	Per 100 kilograms (220.46 pounds).		Articles.	Per 100 kilograms (220.46 pounds.)	
	Francs.			*Francs.*	
Sugar of all sorts	7.00	$1.35	Indigo and its compounds	25.00	4.92
Coffee grains	10.00	1.93	Isinglass	5.00	.96
Cacao grains	20.00	3.86	Silk tissues	100.00	19.30
Cloves (giroffo)	40.00	7.72	Wool in bulk or in skins from Australia, the Cape, and India.	Free.	
Cinnamon bark and cassia bark	40.00	7.72	India cotton, in wool or unginned	Free.	
Pepper and pimento (allspice)	40.00	7.72	Jute, aloes, phormium tenax (flax bush), abaca (manila hemp), fibers of cocoa and other filamentous plants (except cotton), raw, stripped, thrown, or in twists, combed or in tow, suitable for netting, matting (sparterie), cordage, and spinning	Free.	
Amomum and cardamom	10.00	1.93			
Vanilla	10.00	1.93			
Tea	50.00	11.58			
Tobacco:					
In leaf or twist ("cotes")	6.00	1.15			
Manufactured	8.00	1.54			
Balsam	6.00	1.15			
Roots, herbs, leaves, flowers, and barks of a medicinal nature (except quinaquina bark)	5.00	.96			
Quinaquina bark	Free.		Ceylon plumbago	Free.	
Medicinal fruits	6.00	1.15	Health tobacco (tabac de sante et d'habitude)	Free.	
Sponges	5.00	.96			
Tortoise shell (back, nails, inferior—"caouanes")	6.00	1.15	Chinese and Japanese porcelain	30.00	5.79
Mother-of-pearl, cut or with its crust removed	6.00	1.15	Enamels cloisonné	50.00	9.66
Guano	1.80	3.47	Bronzes	40.00	7.72
Mineral oils and essences	5.00	.96	Mats and basket work	5.00	.96
Borax (crude, half refined, or refined)	5.00	.96	Furniture	30.00	5.79
Cochineal	12.00	2.31	Nutmeg and mace:		
Lacquer, in dyes or troches	6.00	1.15	In the husk	40.00	7.72
			Without husk	50.00	9.65
			All other merchandise	3.60	6.94

EXPORTS FROM BARMEN TO UNITED STATES.

I inclose a statement of the declared value of exports from this consular district to the United States during the fiscal year ended June 30, 1897.

You will readily see that there was quite a decrease in the exports for the first three quarters, but also that there is a marked increase during the last quarter, ending June 30, 1897, over the preceding year. Shipments to United States ports have been so large recently that even the owners of steamships suspended their ordinary tariffs in order to be able to charge higher rates. The obvious intention was to supply the demands of the United States market before the Dingley bill took effect. The manufacturers of cutlery, for instance, were working day and night prior to July 1; to-day, there is total idleness. Thousands of workmen who were formerly earning good

wages are now idle, and it will be quite awhile, if at all, before the trade will recuperate.

Business in the silk manufactures is also somewhat depressed, owing to the advanced tariff; but in all other industries one can not notice any decrease in the exports to the United States. On the contrary, manufacturers here are on the lookout for a prosperous time, especially after the enormous consignments which have been made are disposed of.

At present, the imports from the United States into this district are small; but this does not exclude the idea that if our manufacturers would try to introduce their wares properly, they would find a market for a good many articles, as, for instance, structural iron, agricultural implements, furniture, etc.

Declared value of the exports from the consular district of Barmen to the United States during the fiscal year ended June 30, 1897.

Articles.	Quarter ended—				Total for the year.
	Sept. 30, 1896.	Dec. 31, 1897.	Mar. 31, 1897.	June 30, 1897.	
Beltings and bone casings	$18,634.30	$7,023.45	$5,206.68	$8,766.03	$40,630.46
Braids, feather stitch, gallons, trimmings, etc	83,406.92	138,125.39	213,369.00	204,705.65	639,606.96
Button stuffs	1,561.98	3,162.57	6,176.23	10,529.10	21,429.88
Buckles and buttons, hooks, eyes, etc	33,604.58	15,586.12	27,924.49	28,678.14	105,793.33
Chemicals and dyes	123,611.78	228,012.77	355,564.03	328,304.80	1,035,493.47
Cutlery	341,860.58	224,093.44	302,840.64	653,236.30	1,522,030.96
Hardware	113,862.27	60,134.38	54,352.88	40,437.73	268,787.26
Hatbands and ribbons	239,420.71	185,527.59	224,972.47	241,231.80	891,152.57
Laces (boot and shoe)	43,040.59	48,799.20	52,147.69	61,180.84	205,168.32
Laces, linen	42,104.60	97,365.93	122,984.19	104,261.08	366,715.80
Machinery	1,161.62	2,414.20	700.66	1,263.95	5,540.43
Miscellaneous	15,107.45	12,254.88	27,607.56	15,231.17	70,201.06
Needles and pins	24,101.56	22,205.89	16,109.56	31,371.58	93,788.50
Nickel	5,686.16	2,711.85	964.61	4,139.16	13,501.78
Paper	14,704.39	9,005.02	17,173.13	16,548.89	57,431.43
Provisions	2,201.26	12,950.81	19,533.73	5,074.33	39,760.13
Silk and cotton mixed goods	93,583.94	92,419.93	137,894.82	173,008.56	496,907.25
Upholstery goods	21,985.28	19,240.91	9,225.29	49,210.75	99,662.23
Woolen mixed and other piece goods	128,304.87	56,629.17	97,780.99	125,222.44	407,937.47
Yarn	4,819.45	4,497.29	24,169.18	13,431.47	46,917.39
Total	1,352,764.29	1,242,160.79	1,717,697.83	2,115,833.86	6,428,456.77
Total, preceding year	1,746,444.72	1,711,030.94	1,814,328.45	1,435,787.21	6,707,591.38
Increase				680,046.59	
Decrease	393,680.43	468,870.15	96,630.62		279,134.61

MAX BOUCHSEIN,
Consul.

BARMEN *August 27, 1897.*

DRIED BEER GRAINS IN GERMANY.

In connection with my report of July 3, 1897,* I have the honor to inclose the translation of a very pertinent letter on the subject of the adulteration of dried beer grains by United States shippers, received by me from the firm of Sandel Katz, of this city.

The Department was kind enough to give a wide publicity through the press to the warning contained in that report that German consignees would positively decline all shipments of adulterated grains.

These grains have heretofore been admitted into Germany free of duty as an article of food for cattle. But it is very essential that our exporters should clearly understand that, if they are found mixed with a dutiable article or articles, they will be made to pay duty accordingly. The most common adulteration is ground indian corn. This pays a duty under the German tariff (section 9c) of 1.60 marks (38 cents) per 100 kilograms, or 16 marks ($3.80) per ton, which would practically amount to a prohibitive duty and destroy the trade. Even if importers here were willing to accept the adulterated article, in order to avoid difficulties and lawsuits with their consignors, the customs duty would prevent them. It seems a great pity that such a growing and valuable trade should be jeopardized so seriously through the shortsightedness of some of our leading exporters of this article.

W. HENRY ROBERTSON,
Consul.

HAMBURG, *September 4, 1897.*

HAMBURG, *August 16, 1897.*

To the AMERICAN CONSULATE, *Hamburg.*

As is no doubt well known to the consulate, I am a purchaser of large quantities of American products, not only of cotton-seed meal and cake and dried grains, but also of other cattle food. In the last few years I have made a specialty of importing dried beer grains into Germany, and have reached an import total of about 20,000 tons of American products. Recently, however, I have been obliged to notice to my regret that some shipments have arrived in very bad condition, and I consider it best to inform the consulate of this fact, which it may perhaps be able to bring to the notice of the proper authorities, in order that such adulterations by American shippers may be discontinued in the future.

I buy in America dried American beer grains, guaranteed, naturally, as pure and unadulterated goods. Recently, however, there have frequently arrived here shipments where the articles have been mixed with other products, such as maize and, especially, gluten feed. As my American friends know that I am a purchaser of large quantities, I have received to-day the following information from a Milwaukee friend with whom I have already closed numerous large contracts:

"To our great astonishment we ascertained last week that our competitors, to

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* Printed in CONSULAR REPORTS No. 205 (October, 1897), p. 283.

whom we had sold our beer grains for the next three months, were mixing these grains with an inferior article and were then selling them again. Should you buy beer grains in our bags, we decline any responsibility for these grains, so long as they are not received direct from us. As there is no law here against adulteration, we can do nothing in the matter. We call your attention, however, to the fact that adulterated dried grains are being sent out from Milwaukee, and that we have absolutely nothing to do with these, although, in fact, the same are packed in our bags."

I respectfully request the consulate to be kind enough to accede to my above-expressed wish, and remain, with the highest esteem,

ppa SANDEL KATZ,
EMIL RONSHEIM,

COMMERCIAL COMPANIES IN EGYPT.

A large number of bankers and business men established in Egypt recently addressed a petition to the Government of the Khedive to obtain a modification of article 49 of the code de commerce mixte, which provides that shares of commercial companies with a capital not exceeding 200,000 francs ($38,600) must have a value of not less than 100 francs ($19.30) each, and of those with a capital exceeding 200,000 francs the shares must have a value of not less than 500 francs ($96.50) each. The petitioners point out that the restrictions of the issue of shares of companies having a capital of over 200,000 francs to a minimum of 500 francs' value each is a hindrance to their development and urgently request, therefore, that this limit be reduced to conform to that of foreign laws.

The Government has prepared a decree reducing the limit of value of shares above mentioned to a minimum of 100 francs, irrespective of the capital of the company.

ETHELBERT WATTS,
CAIRO, *August 12, 1897.* *Acting Agent and Consul-General.*

SWISS EXPORTS TO THE UNITED STATES.

For July, 1897, Swiss exports were materially smaller than for the same period of 1896, but August shows a still further decline in exports to the United States. While the shipments for July amounted to 4,666,000 francs ($887,812.38), as against 5,576,000 francs ($1,076,168) for July, 1896, August, 1897, shows but 3,348,000 francs ($646,164), as against 5,764,000 francs ($1,112,452) for the same period of 1896. These losses are particularly noticeable in the St. Gall and Zurich consular districts. During August, 1896, St. Gall exported merchandise invoiced at 3,137,000 francs ($605,441), while during August of this year the export figures fell to 1,621,000 francs ($312,853). The first figures included 2,998,000 francs' ($578,-

613) worth of embroideries, while in the latter, the same article is represented with 1,247,000 francs ($232,951) only, or hardly half the figures of 1896. Zurich silks and half silks show a decline of $42,653 as against August, 1896, and cotton and knit goods a decline of $29,-143 for the same comparative periods. The district of Basel exported $54,233 worth of watches and watch materials in August, 1896, while for the same month of this year the figures are but $8,878. The same district, however, shows an export increase in aniline colors for August of $16,598 over last year's shipments. The export of Swiss cheese has suffered, especially in the consular district of Berne, where the shipments show a less value of $28,950, which hardly represents the real difference, owing to the fact that the price of Swiss cheese is from 12½ to 15 per cent higher than it was at the same period of last year; and even at these high figures (good, full cream Swiss cheese is selling in large lots for export at from 165 to 170 francs per 100 kilograms of 220 pounds), stocks have been well cleaned up, the European demand having increased.

EUGENE GERMAIN,

ZURICH, *September 10, 1897.* *Consul.*

TARIFF OF MADAGASCAR.

Mr. Henry Vignaud, secretary of the embassy at Paris, writes under date of August 24, 1897, that the French general tariff was made applicable to Madagascar by a decree of August 16; but by another decree, dated July 28, 1897, a number of articles were excepted from the application of this tariff, and special rates were fixed for their entrance into the island. These rates, says Mr. Vignaud, are much lower than those fixed by the general tariff and are equivalent, in most cases, to those provided for by the minimum tariff. Articles imported from the United States pay much less than when imported into France; for instance, common woods are free; petroleum pays only 3 francs (57.9 cents) per 100 kilograms (220.46 pounds), instead of 9 francs; cotton goods of all sorts and wood for cabinet making are also given the advantage of a lower rate.

A report from Consul Wetter, dated Tamatave, August 15, 1897,* says that United States cottons have been holding their own, in spite of the fact that there has been a 10 per cent ad valorem duty, while French cottons are admitted free. A very clever imitation has been recently placed upon the market by French manufacturers. The French general tariff, if applied without exemptions to Madagascar,

* To be printed in Commercial Relations, 1896-97.

would have practically closed that market to United States goods. Speaking of the petroleum trade, Consul Wetter says:

No petroleum has come into Madagascar direct from the United States during the fiscal year ended June 30, 1897, but some 4,500 cases of American origin have come in from Mauritius. This is the more remarkable because of the fact that for over six months this oil has been commanding in Tamatave from $4 ($3.48) to $4.50 ($4.31) per case of 10 gallons. The consumption tax of 2 cents per kilogram (2.2046 pounds) on this oil (see CONSULAR REPORTS No. 202, July, 1897, p. 421), together with the stringent local regulations as to its handling, have tended to stifle the trade and force up prices. There is a small but steady importation of Russian oil on the west coast.

A translation of the list of exceptions to the general tariff, inclosed by Secretary of Embassy Vignaud, is as follows:

Decree of July 28, 1897, giving the exceptions to the general customs tariff which apply to foreign products imported into Madagascar.

Articles.	Duty.
Class II.—Animal products.	
Pure condensed milk	5 francs (96.5 cents) per 100 kilograms (220.46 pounds).
Condensed milk with sugar	34.80 francs ($6.71) per 100 kilograms.
Class III.—Fisheries.	
Fish (dried, salt, or smoked), except cod, stockfish, herring, mackerel, sardines, and anchovies.	50 per cent of the maximum tariff.
Class VII.—Fruits and seeds.	
Seed grain	Free.
Class VIII.—Colonial products for consumption.	
Pepper	104 francs ($20) per 100 kilograms.
Allspice	Do.
Tea	Do.
Class XI.—Wood.	
Common wood:	
Squared or sawn	Free.
Strips and laths	1.50 francs (28.9 cents) per 100 kilograms.
Staves	75 centimes (14.4 cents) per 100 kilograms.
Class XVI.—Marbles, stones, earths, combustible materials, minerals, etc.	
Sulphur, pulverized	2.25 francs (43.4 cents) per 100 kilograms.
Coal	Free.
Oil of petroleum, schist, and others (crude, refined, and essences of).	3 francs (57.9 cents) per 100 kilograms.
Mineral oils for illumination (crude, refined, and essences of)	Do.
Heavy oils and residues of petroleum and other mineral oils	Do.
Class XVII.—Glazed yarns, twine, cordage (of hemp, linen, jute, phormium, etc.).	
Cordage or yarn, double twisted, and cables, glazed or not, tarred or not, having a diameter of more than 10 millimeters (0.394 inch), unbleached.	20 francs ($3.86) per 100 kilograms.
Cordage or yarn, double twisted, and cables, glazed or not, tarred or not, more than 10 millimeters in diameter, bleached or dyed.	26 francs ($5) per 100 kilograms.

Decree of July 28, 1897, giving the exceptions to the general customs tariff, etc.—Cont'd.

Articles.	Duty.
Class XXXII.—Cotton tissues and drills.	
Tissues of cotton (pure, plain, twilled, and drills), unbleached, containing in warp and woof,* in a square of 5 millimeters (0.197 inch) such tissues weighing:	
13 kilograms (28.65 pounds) or over, per 100 square meters (119.60 square yards)—	
27 threads or less	62 francs ($11.91) per 100 kilograms.
28 threads and more	97 francs ($18.72) per 100 kilograms.
11 kilograms (24.25 pounds), inclusive, to 13 kilograms, exclusive—	
27 threads or less	70 francs ($13.51) per 100 kilograms.
28 threads and more	108 francs ($20 84) per 100 kilograms.
9 kilograms (19.84 pounds), inclusive, to 11 kilograms, exclusive—	
27 threads or less	90 francs ($17.37) per 100 kilograms.
28 threads and more	140 francs ($27.02) per 100 kilograms.
7 kilograms (15.43 pounds), inclusive, to 9 kilograms, exclusive—	
27 threads or less	107 francs ($20.65) per 100 kilograms.
28 threads and more	175 francs ($33.77) per 100 kilograms.
5 kilograms (11.02 pounds), inclusive, to 7 kilograms, exclusive—	
27 threads or less	129 francs ($24.89) per 100 kilograms.
28 threads and more	212 francs ($40.91) per 100 kilograms.
3 kilograms (6.61 pounds), inclusive, to 5 kilograms, exclusive—	
27 threads or less	230 francs ($44.39) per 100 kilograms.
28 threads and more	399 francs ($77) per 100 kilograms.
Less than 3 kilograms per 100 square meters (119.60 square yards).	620 francs ($119.66) per 100 kilograms.
Tissues of cotton (pure, plain, twilled, and drills):	
Bleached	Same duty as unbleached tissue, with an addition for bleaching of 40 per cent (minimum of general tariff).
Dyed	Same duty as bleached, with an addition of 15 per cent.
Printed	Do.
Class XLVII.—Furniture.	
Of bent wood:	
Varnished	18 francs ($3.47) per 100 kilograms.
Unvarnished	12 francs ($2.31) per 100 kilograms.
Chairs, not carved, inlaid, ornamented with copper, gilt, or lacquered, of common wood.	9 francs ($1.73) per 100 kilograms.
Other furniture than chairs, massive, of common wood	5 francs (96.5 cents) per 100 kilograms.
Class XLVIII.—Articles of wood.	
Casks, empty, hooped with wood or iron	2 francs (38 cents) per 100 kilograms.
Frame work:	
In hard wood	2.50 francs (48 cents) per 100 kilograms.
In soft wood	2 francs (38 cents) per 100 kilograms.
Wood, planed, grooved, and (or) tongued, planks, strips, and veneers for parquetry, planed, grooved, and (or) tongued:	
In oak or other hard wood	5 francs (96.5 cents) per 100 kilograms.
In fir or other soft wood	3.50 francs (67 cents) per 100 kilograms.
Doors, windows, wainscoting, and other carpenters' work, fitted together or not:	
In hard wood	20 francs ($3.86) per 100 kilograms.
In soft wood	12.50 francs ($2.41) per 100 kilograms.

* In counting threads, both of warp and woof, fractions are ignored.

Decree of July 28, 1897, giving the exceptions to the general customs tariff, etc.—Cont'd.

Articles.	Duty.
Class XLIX.—Musical instruments.	
Accordions	1 franc (19.3 cents) each.
Class L.—Manufactures of various materials.	
Vehicles for commerce or agriculture:	
Hung on springs	12 francs ($2.31) per 100 kilograms.
Not hung on springs	6 francs ($1.15) per 100 kilograms.
Wagons for earthwork	5 francs (96.5 cents) per 100 kilograms.
Matches	Free.

BUTTER IN MARTINIQUE.

I have the honor to report that I am constantly in receipt of letters of inquiry of exporters of butter and oleomargarine from the United States, to all of which I have replied. As the recently promulgated law prohibiting the importation into this island of the latter will doubtless stimulate the butter trade in the near future, I have carefully looked into the matter and have hereby the honor to submit the result of my investigation, showing the import of butter and oleomargarine during 1896 and for the past seven months of 1897, from which deductions can be drawn, when it is considered that colored oleomargarine is out of the market.

Fifteen or twenty years ago, only genuine butter (more or less adulterated) was consumed in this island. Since then, oleomargarine was introduced, first in small quantities, colored to the grade of cooking butter, yellow and red, imported only from the United States. By degrees, oleomargarine, which keeps well in this climate (in fact, never becoming rancid), gained ground, to the prejudice of the butter trade, and to such an extent that "Morlaix" (French brand), which had an important trade in the red sort, found its business reduced to an insignificant figure. The yellow cooking grades, which were imported from Brittany and Normandy, were likewise reduced in the same proportion. The United States, which also had a good share of the butter trade, had to compete with its own product—oleomargarine. In the figures below, I mention the import of oleomargarine in order to show the proportion compared to the quantity of butter imported into this port and to give an idea of the volume of the butter trade twenty years ago, when oleomargarine was unknown here.

The import of oleomargarine from the United States during 1896 was 4,926 cases; import of butter from the United States and France during 1896, 674 cases and 59 kegs. The cases contain 100 pounds in 5, 10, and 20 pound tins.

Butter imported this year from the United States was: From January 1 to June 30, 320 cases and 5 kegs; from July 1 to August 31, 171 cases; total, 491 cases and 5 kegs.

Butter imported from France from January 1 to June 30, 1897, was 28 cases and 67 kegs; butter imported from France from July 1 to August 31, 1897, 10 cases, 55 kegs, and 20 half kegs.

The total import of butter from the United States and France from January 1 to August 31, 1897, was 529 cases, 127 kegs, and 20 half kegs.

The import of margarine from the United States was: From January 1 to June 30, 1897, 2,620 cases and 65 kegs; from July 1 to August 31, 1897, 321 cases; total, 2,951 cases and 65 kegs.

The market was well stocked with margarine when the prohibitory law of June 1, 1897, was promulgated regarding colored margarine. This prohibition will open the market for the red "Morlaix" butter and similar brands from the United States. This change, however, has as yet not been noticed, owing, as stated, to the full stocks of margarine on hand.

The following questions are generally asked by exporters from the United States, and, in order to reply fully, I must note a difference in yellow and red cooking butter and table butter:

(1) From what country is butter imported into Martinique? Red cooking butter is imported from Morlaix and from the United States, yellow butter from France, and table butter from Nantes and Isigny (France) and Copenhagen (Denmark).

(2) Which are the most popular brands? The most popular brand of red butter is the "Puyo," of Morlaix, in kegs of 21 kilograms (46.29 pounds). The most popular brand of yellow butter is Ch. Grill (Nantes) and L. Levesque (Nantes). The most popular brand of table butter is "The Three Cows," E. Rothenborg, Copenhagen, and F. de Magny (Isigny, France).

(3) What is the average price obtained? Red cooking butter (Puyo brand), Morlaix, is sold at 45 francs ($8.68) per keg of 20 kilograms (44.00 pounds); red cooking butter (Bartram brand), New York, is sold at 65 francs ($12.54) per case. Yellow cooking butter (Levesque brand), Nantes, in tins of 250 grams (0.55 pounds), 500 grams (1.1023 pounds), and 1 kilogram (2.2046 pounds) is sold per case at 2 to 2.50 francs (38 to 48 cents) per kilogram. Table butter, Rothenborg, Copenhagen, is sold per case at 2.25 francs (43 cents) per tin of 1 pound.

(4) What is the rate of duty per pound or kilogram? Customs dues, 13 francs ($2.50) per 100 kilograms (220.46 pounds) net weight; municipal dues, 8 francs ($1.544) per 100 kilograms net weight; wharfage dues, 20 centimes (3.8 cents) per case; statistic dues, 15 *centimes* (2.8 cents) per case.

(5) Do the United States creamery and other good brands of butter, if properly prepared, stand a good chance of becoming popular? If the butter is good and placed in the hands of a good firm who will push it, with the help of posters and advertising, there is no doubt in my mind but that it would rapidly gain ground.

(6) Which are the principal importing houses and dealers in butter? De Massias fréres et de la Villegégu, H. Depaz & Co., and Plissomeau & Co.

The above questions and answers cover the whole ground, I think, and will afford all the information wanted.

JULIUS G. TUCKER,
MARTINIQUE, *September 14, 1897.* *Consul.*

GOLD EXPORT TAX IN NICARAGUA.

Under date of the 23d instant, Mr. M. J. Clancy, our consular agent at Bluefields, reports as follows:

The owners of gold mines in this vicinity are exceedingly worried over the decree establishing an export duty of $1 (gold) per ounce on gold ingots and $2 (gold) per ounce on gold dust. The decree was published August 15 in Diario Oficial and takes immediate effect.

Gold heretofore shipped from Bluefields has been subject to an export duty of 80 centavos (35.44 cents in United States currency) per ounce.

A letter of the same date from an American merchant in Bluefields who has invested heavily in mines and mining machinery states that—

The decree published July 15 in Diario Oficial has caused consternation among those who have invested capital in gold mines; and this law and the one placing an export tax of 10 centavos (4.43 cents in United States currency) per pound on rubber will gradually kill this coast and ruin the trade we have labored over ten years to establish.

The shipments of gold from Bluefields during the year ended June 30, 1896, amounted to $137,929.14 (United States). The shipments for the year ended June 30, 1897, amounted to $169,565.55 (United States), an increase of $31,636.41. The increase would not seem to indicate any great addition to the machinery employed in eastern Nicaragua at the date of my report published in CONSULAR REPORTS for September, 1896 (No. 192, p. 126).

It is unquestionably true that five or six of the mines in that section are quite valuable, and that there is strong probability of discovering others equally good. Some of the quartz specimens have been rich enough to interest United States capitalists, and five or six mining experts have visited the country during the last year.

An expert arrived in July last whose salary is $30 a day and expenses. This salary, perhaps, may seem to some persons rather small for a mining expert; but it is $30 in gold, and even capitalists do not pay $30 a day without some hope of getting it back. Three or four leading merchants in Bluefields have had faith in the productiveness of mines on the Atlantic side and have invested money. But, while gold in in paying quantities has been taken from a few mines, the average yield, as shown by the custom-house books, has not been such as to occasion a rush for the mining districts. A gentleman who has spent considerable time prospecting on this coast states that last year six hundred men on an average were steadily employed in the gold districts of eastern Nicaragua—some mining and others prospecting.

With a yield of $169,565.55 for the year, the daily product (including Sundays) would be but $464.56, or less than 78 cents a day for each miner and prospector. It is reported, however, that an abundance of gold goes out of the country without paying tribute to the public treasury.

The mine owners will probably address a petition to the Nicaraguan Government, setting forth substantially as follows:

(1) That 90 per cent of the capital invested in mines in eastern Nicaragua is foreign capital.

(2) That the Nicaraguan Government having expressed itself as being extremely favorable to foreign immigration and to the development by foreigners of the country's natural resources, Americans and other foreigners invested largely in gold-mine properties, bought expensive machinery, and made considerable outlay in other directions, believing all the time that the Government would encourage rather than hinder the development and working of gold mines on the Atlantic coast.

(3) That these expenditures were made with knowledge that a tax of $1 silver (44.3 cents in United states currency) per ounce would be exacted on all gold shipped from the country, but that there was reason to believe that the Government, in appreciation of the efforts made and the capital invested by the petitioners to develop and make known to the world the riches of what had been a wilderness, would reduce the export tax.

(4) That transportation facilities on the coast are of the poorest character, there being neither railways nor wagon roads, and the cost of transporting goods being excessive, especially in the case of heavy machinery.

(5) That much of the machinery has been but recently set up, the result as to profits or returns as yet being conjectural; and, although the petitioners were willing to take their chances with a tax of $1 silver (44.3 cents in United States currency) per ounce, in but very few instances would they have invested in mining machinery had they known or been given reason to suspect that the tax would be increased to $1 (gold) on bars and $2 (gold) on dust.

(6) That two or three years hence, at the end of the experimental period, the industry might stand an increase of tax; but to increase it at this time, before investors have had opportunity to know what can actually be done, would cause most of the works to be suspended, all unfilled orders for machinery to be canceled, and the idle machinery to remain where it is and be destroyed by the elements.

(7) That while Nicaragua unquestionably has the right both to levy and increase an export tax on gold or any other of her products, yet the petitioners believe that the Government, if cognizant of the actual condition of the mining industry on the Atlantic coast, would hesitate to enforce a law which, without adding to the public revenues, would paralyze an important industry and visit loss and hardship upon men who have given time, energy, influence, and capital toward the establishment of numerous and prosperous settlements in eastern Nicaragua.

THOMAS O'HARA,
SAN JUAN DEL NORTE, *August 27, 1897.* *Consul.*

PROPOSED CHANGES IN HAITI'S FINANCES.

Minister Powell writes from Port au Prince under date of September 15, 1897, substantially as follows:

A proposition is now pending before the Chamber of Deputies to consolidate the several debts of the Republic into one national debt, destroy the paper money in use, and substitute a gold currency based on the United States gold dollar as a unit of value. The Government will endeavor to secure a loan from some large banking houses in the United States to the amount of $6,000,000, the rate of interest to be 6 per cent per annum. The present debt consists of: (1) Debt contracted under President Domingue (interest at 5 per cent), $4,220,152; (2) debt due from 50,000,000-franc loan (interest at 6 per cent), $9,300,000; (3) debt converted and consolidated (5 per cent), $4,205,050; (4, 5, and 6) bonds not convertible, bonds accepted for customs, and treasury bonds (6 per cent), $1,341,441; (7) other treasury bonds (7 per cent), $922,538; (8) $5 bills issued by President Legitime, to be paid at 80 per cent of their face value (gold), with interest at 12 per cent, $6,373; (9) paper money in circulation, $3,873,539; current loans, $3,006,650; total amount of debt, $26,875,784.

The Government hopes by means of the loan to reduce the present high rate of premium (now 180 per cent) and raise the value of the bonds. The interest on these bonds is to be paid in gold at the above-named rates. The present rate is 5 per cent, payable in Haitian paper currency, which is a legal tender for all dues collected by the Government through the customs.

The rate of exchange is controlled by two or three bankers, who loan money to the Government at a high rate of interest—18 per cent per annum. Thus the Government is kept constantly in debt. The proposed loan is to be secured by a portion of the duty on the coffee crop, estimated to be worth about $2,000,000 annually, and a portion of the import duty, which it is intended to increase 25 per cent. The money thus obtained will constitute a sinking fund for the payment

of these bonds. Heretofore, loans have been obtained through local merchants or through the Bank of France, which has a branch establishment here.

This loan, continues Mr. Powell, would result in a closer relationship between the two countries and a consequent diminishing of French and German influence in the island; a kindlier feeling toward our importations; and more security to our citizens, who hold $181,240 of the class of bonds known as "l'amortissement" bonds. It is also proposed, if the loan is effected, to have all the fractional silver currency reminted in the United States according to the standard of our silver currency. This would make the rate of exchange easy. From 1872 to 1883, American [United States] money had a wide circulation here, but it was forced out of the country about the time paper money was introduced. The paper money has decreased in purchasing power until there is a universal demand for a more stable currency. "If the Chambers accept the plan proposed," says Mr. Powell, "I think a new era of prosperity will dawn upon the country."

GOLD STANDARD IN SALVADOR.

Acting Consul Chable, of San Salvador, sends through Minister Baker (under date of August 22, 1897), a copy of a law passed on August 18, 1897, by the Legislative Assembly, of the Republic of Salvador adopting the gold standard. The law decides that import duties in seaport custom-houses shall be paid at the rate of 53 per cent of the tariff, in the following manner: Thirty-two per cent in American gold coin, 10 per cent in bonds of any one of the five issues against the custom-houses, 5 per cent in bonds of the mint, and 6 per cent in bonds of the French debt. Of the 32 per cent in American gold, 12 per cent shall be remitted to a bank having charge of the public debt, which will pay the interest on the 12, 6, and 3 per cent bonds in gold and at the legal rate of exchange and place the surplus at the disposal of the Executive, to be used for Government expenses. This surplus shall be used by the Executive for only one year, after which time it shall be applied to the amortization of the 12 and 6 per cent bonds. The legal rate of exchange shall be based on the relation between gold and silver in New York. The duties which are now collected at 30 per cent silver shall be reduced to 12 per cent gold, the payment to be made in that coin.

The Executive is authorized to contract for a foreign loan of £500,000 ($2,433,250), to be paid in gold and to be applied to the internal debt. The law does not alter pending transactions; and if

it is stipulated in the same that current money shall be used, this can be complied with by paying legal silver coin at the contract date or gold at the proper rate of exchange. The law shall take effect in two months.

The Executive is further authorized to contract for the establishment of a bank with a gold capital, the discount rate of which shall not exceed 10 per cent per annum.

UNITED STATES SYNDICATE IN HONDURAS.

Consul Jarnigan writes from Utilla under date of August 3, 1897, in regard to a concession by the Honduras Government to citizens of the United States. A copy of the contract, transmitted by Vice-Consul Bernhard, of Tegucigalpa, under date of August 30, 1897, gives the names of the syndicate as follows: Chauncey M. Depew, W. Seward Webb, John Jacob Astor, Benjamin F. Tracy, J. G. McCullough, Frederic B. Jennings, George S. Scott, Nathaniel A. Prentiss, Charles McVeigh, and Melville E. Ingalls, jr. The agents for the syndicate were Henry L. Sprague and W. S. Valentine, of New York.

The concessionaries are to construct and operate a railroad from Puerto Cortez, on the Atlantic, to the Bay of Fonseca, on the Pacific coast. The Government grants the syndicate the railroad, with all its appurtenances, now being operated from Puerto Cortez to La Pimienta, a distance of about 30 miles. The company is granted exclusive right of transit over land and water throughout the length of its route—the water rights being limited, however, to the construction of bridges, wharves, etc., necessary in the operation of the railroad. A subsidy of 100 English feet of land is granted on each side of the road, whether it passes through public or private lands. In the latter case, the Government is to pay the proper indemnity to the owners, and the company is to pay for the improvements of the land, in accordance with law. When the road passes inhabited sections, only half this width of land is granted.

The Government concedes 5 square miles of land for every mile of railroad constructed. The land is to be located contiguous to the road, in alternate sections, when the road traverses public lands. When it traverses private property, the company has a right to select sections of land (under the above-named conditions) from the public property. This choice is to be made within five years from the date of contract. The grant is not to extend within one mile from the coast line, but the company is allowed the privilege of constructing stations, etc. Branch roads can be constructed under conditions

similar to those given for the main road, and one shall extend to Tegucigalpa. The company can use all materials necessary for the road which are found in the Government lands, and no charge shall be made for the same. It also has the right to all minerals, etc., found in the lands conceded, provided that this does not interfere with previously acquired rights of third parties. The development of these minerals is to be subject to the mining laws of the country.

The width of the line is not to be less than 1 yard 6 inches. Five miles shall be constructed within the first year. At the end of the second year, 25 miles are to be finished; at the end of the third year, 50 miles; at the end of the fourth, the road must have arrived at Comayagua; at the end of the sixth year, the line is to be completed and opened to the public. If the company fails to comply with these conditions, it shall pay to the Government 15 per cent of the gross receipts of the line until the conditions are fulfilled, an extension of time having been granted. At the expiration of this extension of time, if the said number of miles has not been completed, the road will pass into the hands of a trustee. The Government mail is to be carried free, and officials (not traveling in a private capacity) are to be subjected to no charge. The transportation tariff shall not exceed that on the portion of the line now in operation (except in the case of interoceanic traffic). The cost of transportation of products of Central America is to be made as low as possible. Passengers and freight engaged in interoceanic travel or transportation are not to be subjected to customs duties. All materials for the railroad are to be admitted into the country free. Foreign colonists and workmen can be introduced (with the exception of negroes and Chinese), and the same will be exempt from personal taxes for ten years. The syndicate can issue bonds (not to exceed $20,000 in gold for each mile of road) and can transfer rights in the property to any one, except to foreign governments. After seventy-five years, the Government will have the right to purchase the road; the same option will be given at the end of each five years following; and at the end of ninety-nine years, the road and all its appurtenances will become the property of the State.

The syndicate undertakes to liquidate the public debt of Honduras, and offices for this purpose will be opened in New York, London, and Paris. Bonds are to be issued for one-fourth the amount of the original debt, to run for twenty-five years and bear interest at the rate of 1½ per cent (gold). These bonds are to be used in the redemption of the old bonds. A bank is to be established, under the name of the Commercial Bank of Honduras, with a minimum capital of $500,000 (gold), divided into shares of $100 each. The bank has authority to act as the fiscal and financial agent of the Gov-

ernment and to be a depository of national funds. It can coin money, the net profits to be equally divided between the Government and the syndicate. The bank can grant mortgages (one-third of its capital to be devoted to this use) at a maximum annual interest of 15 per cent. It can make loans, guarantee Government bonds, and issue notes. There are to be five directors, with an additional one appointed yearly by the Government of Honduras.

The bank was to take control of the customs of the country on October 1, 1897, and the Government promises not to change the tariff so as to reduce the revenue for fifteen years. (According to this agreement, says Consul Jarnigan, the increase in customs duties authorized by act of Congress last April* will not take effect.) The bank is to pay 1,000,000 pesos (about $500,000) to the Government each year, and a certain per cent over this amount is to be applied annually to the payment of the new bonds.

There is to be no tax on the railroad or on the bank capital. The syndicate is to equip one or more vessels to guard the coast and prevent smuggling.

Consul Jarnigan speaks of the mineral and agricultural wealth of the lands conceded and of the advantages to Honduras which will result from their development. The United States, he says, will have practical control of the trade of the country. Climatic conditions are so favorable that Honduras will probably become popular as a health resort.

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*See CONSULAR REPORTS No. 203 (August, 1897), p. 566.

NOTES.

Wine Lees in Greece.—In response to an inquiry from a California correspondent (to whom the answer was sent September 10, 1897), Consul Horton writes from Athens under date of August 20, 1897:

Argols, or lees of wine, for the manufacture of cream of tartar, are shipped from Greece to France and Austria. Formerly, this product could be obtained very cheaply and was given to people who cleaned the wine barrels in exchange for their labor. At present, the demand has greatly increased, and prices on the ground range from 3 to 7 cents per pound. The best quality is said to come from the island of Santorin; but argols are also found in Paros, Cephalonia, Levkas, Corfu, and, in general, wherever black wine is made. There is no depot of this product or firm dealing in it, but manufacturers send experienced men to collect it wherever it may be found. I am informed that about 200 tons are shipped from the Piræus each year. I should judge that a larger quantity is shipped from Syra, as that is the principal port of the Cyclades; but, although I have written to the leading merchants there, I have been unable to obtain any definite information.

Argols are very commonly adulterated in Greece with sand. The buyer wishing to avoid this must be on the spot and take his purchase away with him. A man speaking Greek and accustomed to dealing with Greeks should be sent for this purpose, as the offer to buy a large quantity would immediately result in impossible prices. The best quality of argols is taken from the sides of barrels, and not from the bottom. I have talked with two English merchants of respectable standing residing in Athens, who will investigate the subject and let me know on what terms they can supply argols. American buyers wishing further information can address directly Mr. Arthur Hill, Sophocles street, Athens, or Mr. Edward Hogg, Ophthalmiatrion street, Athens.

From Athens to America via the Florio-Rubattino Line is from thirty-two to thirty-five days. This company quotes freight at 9.20 francs per 100 kilograms ($1.77 per 220.46 pounds); insurance, 6 per cent during summer and 9 per cent during winter. Shipments can also be made through the Dutch Levant Line, but the agent here can quote prices only to Hamburg.

The mayor of Paros writes that the island produces from 6,000 to 8,000 okes (1 oke=2.84 pounds) per year. Put up in sun-dried cakes, the lees of Paros are sold in Syra at 50 to 65 lepta per oke (1 drachma=11.5 cents, which would make 65 lepta equal to 7.4 cents).

Vehicles in Madeira.—Consul Jones writes from Funchal an undated communication, received by the Department September 9, 1897:

For the benefit of the manufacturers of bicycles and for the purpose of saving postage on both sides, I want to say in the CONSULAR REPORTS that practically no wheeled vehicles are used in Madeira. When I came here ten years ago, there was not a wheel on this island. Now, we have half a dozen carriages used as omnibuses to carry people from the city to the suburbs, where roads and streets are level; but they can not be used on the mountain sides. The streets of Funchal are paved with small, smooth stones brought from the seashore. The ground is carefully prepared, and the small stones are well laid down, each fixed in its place; and when a square is finished, it is pounded to a level with a heavy maul. As there is no frost here, they never need repair or get out of place. Some of these pavements have been laid for more than two hundred years and are better to-day than when first laid down. Time and use have made them more solid and smooth.

We ride here in sleds drawn by oxen, on horses, and in hammocks. Our sleds (or cars as they are called) are carriages on runners, instead of wheels. Some of the private cars are beautifully upholstered. The bodies are made of hard wood, carved and finely finished. The bullocks are large, well groomed, and can be safely used up or down hill at almost any angle. Every driver carries a rag or coarse towel well saturated with grease. This from time to time he puts down in front for the runners to pass over. In summer during the dry season, the grease and friction make the pavements almost as smooth as glass, and this compels the buying of Madeira-made boots. The soles of these boots are spongy and cling to the pavement. Everybody uses the bullock cars. They glide over the smooth stones at the rate of a mile in several minutes. Ladies pay their calls and do their shopping in handsome cars with liveried drivers. At the bottom of the theater programmes, you find "carriages at 11," which means bullock cars. Madeira is mountainous, and the zigzag roads are better adapted to the pedestrian with alpenstock or to the sure-footed donkey than to the bicycle.

The Metric System in Gemany.—The Department is in receipt (under date of July 16, 1897) of an undated report from Consul Monaghan, of Chemnitz, which says:

The Chemnitz Textile Union has addressed a memorial to the Saxon Interior Department, asking for a change in the present system of numbering yarns. It wants the Department to influence not only the Imperial Government, but also foreign states, to adopt the metric system in yarn measuring. The petition reviews past efforts to reform and says success has not been attained because efforts to make the metric system general, while approved of by legislatures, have not been supported by law. England, with all her intelligence and progress, has been opposed to the reform; but it is thought that when prejudices are wiped out, the introduction of the metric system is assured. England uses Indian measurements in the East and the metric system in selling yarn to Alsace. The intricacy and difficulty of existing measurements are manifest in the fact that fully sixty systems prevail, no one of which can compare with the metric. It is true that tables of equivalents have been worked out and are convenient when translating from one language or number into another, but nothing so universally good as the metric system has ever been known. No one can question the wisdom of substituting a system based on decimals for one based on duodecimals, one of the most complicated combinations; no one can find fault with an effort to substitute the meter and kilogram for the yard and pound. The simplicity of the system, the rapidity with which it can be divided or multiplied, make it friends among merchants and manufacturers. It is used all over South America and in many European countries. We will be wise if we adopt it in our intercourse with countries where it prevails.

German Statistics of French Trade.—Consul Monaghan writes from Chemnitz, August 14, 1897:

Germany is eagerly watching the movements of industrial and commercial countries. No department is better directed than the bureau of trade statistics. Recently published details as to French commerce in 1896 show a decrease in the import of foods, although the increased importations of other articles almost make up the difference. The balance of trade is satisfactory, showing a gain of 130,000,000 francs ($25,090,000) over the annual average for the last five years. England, Germany, Belgium, Holland, the United States, Egypt, Mexico, and Portugal buy more from France than she buys from them. England bought last year 1,301,000,000 francs' ($251,093,000) worth, and sold 675,000,000 francs ($129,975,000); Germany follows with purchases of 401,000,000 francs ($77,393,000) and sales

of 382,000,000 francs ($73,726,000); Belgium bought for 576,000,000 francs ($101,168,000) and sold for 348,000,000 francs ($67,164,000); Switzerland bought for 325,000,000 francs ($62,725,000) and sold for 330,000,000 francs ($63,690,000); Russia bought for 35,000,000 francs ($6,755,000) and sold for 253,000,000 francs ($48,829,000), of which 98,000,000 francs ($18,914,000) was grain, etc. Russia buys chiefly in Germany.

Belgian Industrial and Trade Schools.—Under date of August 21, 1897, Consul Morris writes from Ghent:

Recent official statistics show a considerable increase in the number of industrial and trade schools existing in Belgium. There are eighty-two in all and thirty-two apprentice shops. Each of these schools affords the instruction appropriate to its locality—thus, for example, at Charleroi, metallurgy; at Moranwelz, mining; at Soignies, stone cutting; at Ostend, fishing; at Antwerp, maritime construction; at Ghent, weaving; and at Bressage, straw platting is taught. Housekeeping schools and classes number two hundred and nineteen. Altogether, there are three hundred and thirty-three professional, industrial, or trade institutions of instruction in Belgium. The subsidies accorded them by the Government during 1896 amounted to $150,000, while they counted about seven thousand pupils.

Workmen's Houses Exempt from Taxation in Belgium.—Consul Morris, of Ghent, under date of September 3, 1897, says:

The common council of Courtrai, Belgium, has just voted the exemption from certain taxes for workingmen who build dwellings for their own use. The conditions in brief are: There shall be exempted from the building, paving, and sewerage tax—(1) the workingman who, not being an owner of real estate, erects or transforms a building destined to be used by him as a dwelling, and who has secured the property in accordance with certain conditions accorded to workingmen; (2) all societies associated with the savings bureau of the Government which erect or transform buildings by one of the methods prescribed by the said bureau, thereby assisting workmen to the ownership of a dwelling house; (3) incorporated associations, organized for a period of at least ten years, which erect buildings destined to be rented to workingmen and which agree in their charter that their dividends shall not exceed 3 per cent.

The taxes are payable: (1) If the workingman does not actually occupy this house within three months after it becomes inhabitable; (2) if, before the expiration of five years, he ceases to occupy it or

transfers the property to another party not entitled to the exemption; (3) if he establish in it the sale of liquors.

The corporations mentioned must be chartered and must publish their by-laws. If they do not fulfill all details of law, they forfeit their rights to exemption.

At Bruges, in 1896, the common council voted the abolition of these same taxes in favor of all properties the annual income of which was less than $27.80.

Tax on Business Men in Germany.—Under date of August 9, 1897, Consul Monaghan, of Chemnitz, says:

A tax is to be put here on the amounts turned over by firms in each year. It begins January, 1898. It is a city tax and reads thus:

SECTION 1. For the city of Chemnitz, the class of firms put down in paragraph 2 must pay, besides other taxes, a special tax.

SEC. 2. Firms to be taxed are those dealing with foods, articles of luxury, enjoyment (Genussartikel), clothing and similar goods, stock companies, loan associations, limited-liability companies, industrial unions, clubs, societies, etc., branch houses of local or outside concerns.

SEC. 3. As a measure of the tax, the last year's turnover will be taken. If the business is not a year old, a liberal valuation or estimate based on business from the beginning will be made. The turnover taken will consist of the total for which goods have sold. Dividends, rebates, etc., must not be deducted. If goods have been sold at cost, 10 per cent will be added to the amount to make up amount to be taxed. The turnover includes, also, all amounts sold by parties acting for the firm, i. e., selling on commission, etc.

SEC. 4. Up to a 10,000-mark ($2,380) turnover, the tax will be 1 per cent. If the turnover is greater than 10,000 marks, an increase of one-tenth of 1 per cent will be added for each extra 10,000 marks up to 100,000 marks ($23,800) and each subsequent part of a 100,000 marks, and in such a way that the total will pay tax on 100,000 marks. Increased percentage will be taken off the total rather than off each 10,000 marks. If a Chemnitz house has branch houses in Chemnitz, the tax will be taken on the firm's total turnover. The tax falls on full marks. Parts above 50 pfennigs (0½ mark=11.9 cents) count as full; parts below are not counted.

SEC. 5. The year's total turnover is to be declared within ten days of demand. Failure to furnish the facts in ten days prevents right of petition. The same result follows failure to give correct answers to parties authorized to impose or collect the tax.

SEC. 6. The assessments will be made by the city tax assessors, etc.

It may interest the merchants of our country to know that all the large American houses that have offices here must pay enormous taxes for the privilege. This seems strange when one thinks that these houses are here not to sell, but to buy. It seems to me a very shortsighted policy on the part of the authorities. Marshall Field & Co. and John V. Farwell & Co. pay quite a large amount. One would suppose their rents cover taxes enough for whatever conveniences they obtain. Besides, their representatives, whether Americans or natives, have to pay income taxes.

Russian versus United States Petroleum in Germany.—Consul Germain writes from Zurich under date of September 2, 1897:

From a Russian source, I learn that a traffic arrangement has just been completed between the German and Russian state railways, whereby the Russian coal-oil producers will henceforth be enabled to successfully compete against United States coal oil in the German markets. As soon as the new tariff is in force, direct coal-oil shipments, without the burdensome and expensive transfers on the frontier and at a low rate of freights, will be made from Petrowsk, on the Caspian Sea, as well as from the Volga ports of Campelim, Tsaratow, Zoryzin, and Nijni-Novgorod to the principal German cities, as Berlin, Dresden, Leipsic, Hamburg, Bremen, Lübeck, Thorn, Breslau, etc. The question of direct shipments to Königsberg and Danzig is open as yet.

United States Aluminium in Germany.—Under date of August 27, 1897, Consul Germain, of Zurich, says:

I am in receipt of a communication from the Aluminium and Magnesium Fabrik, at Hemelingen, near Bremen, Germany, of which the following is a copy, explaining its purport:

EUGENE GERMAIN,

United States Consul, Zurich.

DEAR SIR: We have seen an article in the papers referring to your report of the production of aluminium in America,* and therefore we take the liberty to address you on the subject for further particulars, and, specially, we should like to know the names and addresses of the different works which make aluminium in the United States. We have been in correspondence with the Pittsburg Reduction Company, but they have their agent in Germany. We wish to import the American aluminium direct from the works, and therefore we shall be very thankful if you could give us the addresses of other works in the United States. Hoping that you will kindly excuse the liberty we have taken of addressing you and awaiting your kind answer, we remain, etc.,

AL. AND M. FABRIK.

I would suggest, if deemed proper, to give this letter publicity, so that aluminium manufacturers desirous of extending their trade to Europe can correspond with this firm. Their reference is the Bremer Filiale of the Dresdener Bank, at Bremen. I have this day answered the communication, informing the inquirers of my action, and at the same time, gave them the addresses of firms which I found in the Importers and Exporters of the United States, omitting the Pittsburg Reduction Company, that firm being already known to the inquirers.

* Published in CONSULAR REPORTS No. 201 (June, 1897), p. 322.

German Emigrants to Mexico.—Consul Monaghan writes from Chemnitz on July 21, 1897:

For many years, Germans have regarded Mexico as a safe place to send that surplus part of the Empire's population that wishes to emigrate. Efforts have been made by influential men, by the Colonial Society, etc., to secure lands and mines and work them with German colonists. An organization known as the Mexican Public Works and Finance Corporation, Limited, with a capital of £250,000 ($1,356,625) has been formed. The shares of this company are put at £1, and the name, I know not why, is English. Most of the men in this movement are Germans. The immediate object of the organization is to get concessions, lands, mines, etc., also contracts to develop lands, to build railroads, waterworks, electric plants—in fact, to do anything that will yield a profit. It is even proposed to open banks, build mills, make State-guaranteed loans, etc. The representatives in Mexico have made good use of their time. They have concessions, options, etc., enough to encourage those in the enterprise to remain and to induce others to enter. The Bank of the State of Mexico (Banco del Estado Mexico), with a capital of $1,500,000, owes its origin to this organization. The bank is to aid the agricultural, commercial, and financial enterprises. It has secured the good will of, if not guaranties from, the Mexican Government. A number of Mexican officials are interested shareholders. The efforts being made in Mexico by this society give evidence of the restless German energies that are seeking sources of wealth and employment in every kind of enterprise. Hardly a country on earth is free from German merchants, manufacturers, and colonists.

Outlook for German Commerce.—The following has been received from Consul Monaghan, dated Chemnitz, August 14, 1897:

The last six or eight weeks were big with meaning to this Empire. There is no disguising the doubt and despondency consequent upon the new United States tariff and England's action in giving notice that twelve months more would end the existing commercial treaty between the two empires. Some cold comfort is being pressed out of the fact that England has asked for a conference, the object of which is to draw up a new treaty. When a commercial treaty thirty-five years old is suddenly terminated, there is something in the action to awaken fear. The Empire is face to face with great changes. The period 1870–1897 has been one of phenomenal growth. The progress of these years in almost every line is unprecedented in German, if not in human, history. All kinds of tales are current as to England's action. It has been asserted on one side that England was

going to join hands with the United States to clip the wings of German commerce; on the other hand, that England was going to change from a free-trade to a protective system; that free trade as an economic system had failed, etc. How much it all means to this Empire, is obvious from its present trade with Great Britain. Of Germany's imports, 15 to 16 per cent came from the British Empire; of her exports, 20 to 21 per cent went thither. England, say writers on this side of the channel, will hesitate to endanger such a large, well-developed, and permanent trade. Besides, retaliation can be easily resorted to. England would not like to have heavy, practically prohibitive, duties put on the coal sent from her mines to German cities. A year is not a long time, but it is long enough for England to look the field all over, long enough for her to find that there is much more to be gained by reciprocity than by reprisals. A writer on the subject recently said:

The question with England has nothing in it to cause much alarm. The real danger is in the United States. The sugar industry's exports thither were enormous. Eighty-eight per cent duty on the raw product shuts our sugar out. In 1895, we took goods worth 511,700,000 marks ($121,774,600)—12.1 per cent of our total imports—from, and sent goods worth 368,700,000 marks ($87,750,600)—10.8 per cent of our total exports—to, the United States. The figures of 1896 favor the United States even more. It is impossible to understand recent legislation. Its aim has been against us. Importers packed into their storehouses during the first six months of 1897, anticipating the tariff, 2,958,506 double hundreds (1 double hundred=220 pounds) of raw sugar, against 1,164,737 double hundreds for the same period of 1896. What is true of sugar, is true also of porcelain, textiles, and toys. There went, in the first six months of 1897, 11,726 double hundreds more textiles from this Empire to the United States than in the same period of 1896, 8,513 double hundreds more china, and 12,217 double hundreds more toys. To-day and to-morrow will not tell how terribly German industries have been hurt. We must wait till the time comes when the storehouses of importers are emptied. By that time, the industries, bolstered up by protective tariffs, will be in a position to put almost, if not quite, as good manufactures on the United States markets. If, in the meantime, it is not possible to obtain better terms, it may be necessary to take away the most-favored-nation privileges and to put the 5 marks duty on United States grains. Whether this measure will bring the United States to its senses, is a question we can not answer. We can raise the duties on petroleum. Both acts would aid German farmers and manufacturers. The appointment of Baron von Thielman, till quite recently German ambassador to the United States, to be Secretary of the Treasury is significant.

The aid that would be given to farmers by taxing American grains and allowing others to come in as of yore, or to industrial enterprises by taxing petroleum, is of a doubtful nature.

Bicycle Census in France.—Consul Germain, of Zurich, under date of September 7, 1897, says:

The bicycle census recently taken in France resulted in the fol-

lowing figures: From January 1 to December 31, 1896, 329,818 wheels were registered throughout the country, as against 256,084 and 203,026 for 1895 and 1894. The total receipts of the bicycle license tax for 1894 were 3,272,339 francs, or $631,551.42. The Seine department leads all others with 62,892 wheels; then come the departments of Seine and Oise with 14,343; Nord, with 10,386; Seine and Marne, 9,085; Seine Inférieure, 8,227; Gironde, 7,985, etc. Corsica shows the smallest number of cyclists, namely, 98; Lozère has 137; Hautes Alpes, 320; Basses Alpes, 402; and so on. Paris paid one-fifth of the whole license tax in 1896, amounting to 629,916 francs, or $121,575.78.

The World's Telegraph Net.—Under date of August 30, 1897, Consul Germain writes from Zurich:

The total length of the world's telegraph system has now reached 7,900,000 kilometers (4,908,823 miles), exclusive of 292,000 kilometers (181,440 miles) of submarine cables. This mileage is apportioned as follows: Europe, 2,840,000 kilometers (1,764,790 miles); Asia, 500,000 kilometers (310,685 miles); Africa, 160,000 kilometers (99,419 miles); Australia, 350,000 kilometers (217,479 miles); America, 4,050,000 kilometers (2,516,548 miles). It will therefore be seen from the above that, notwithstanding the steady increase in the building of telegraph lines all over Europe, America leads and has almost double the mileage of Europe.

Tax on Dogs in Great Britain.—Consul Boyle, of Liverpool, on July 23, 1897, says:

Referring to my report of June 14 last,* relating to the importation of dogs, I beg to state that I have been officially advised that the order does not affect the transshipment of dogs; but if the dogs are intended to be landed, a license will be necessary, though the dogs are to be reexported. There will be no objection to temporarily excepting imported dogs on board a hulk or tender; but if they are landed, a license will be required.

Ribbon Purchases by the United States.—Consul Brunot writes from St. Etienne under date of August 23, 1897:

I have to report that within a few days large orders for cheap-grade ribbons have been placed with St. Etienne manufacturers by New York importers with instructions to hasten delivery. The reason given is the increasing demands of wholesale and retail

* Printed in CONSULAR REPORTS No. 203 (August, 1897), p. 583.

merchants, resulting from the greater ability of their customers to purchase. The outlook for a brisk importing business in the near future is good, and the volume of trade in this line will probably soon exceed that of several years.

Municipal Control of Gas Works in Vienna.—Consul-General Judd sends the following from Vienna, under date of August 14, 1897:

The municipal government of the city of Vienna commenced about 5 months ago to lay their own gas pipes and erect their own gas retorts. They hope to have the entire works for the manufacturing and supplying of gas for its citizens finished by 1899, when the contract between the gas company and the city expires. The gas company has charged 9½ kreutzer (3¾ cents) per cubic meter (35.316 cubic feet) for gas furnished private parties, 7 kreutzer (2.8 cents) for street lighting, and 9 kreutzer for municipal buildings. A monthly rent has also been charged for gas meters. The city authorities have commenced negotiations looking to the purchase of the plant. Thirty-five million florins was the first price asked by the company for its gas works, pipes, etc. This figure was in time reduced to 30,000,000, 25,000,000, and finally to 16,000,000, all of which offers the city declined to entertain, until finally all negotiations were broken off, and the city commenced to lay its own pipes, etc. This arrangement will be expensive to both parties. With the expiration of the contract, the old plant will be almost a dead loss to the company, and the new gas works will cost the city more than the price asked for the old ones.

A commission appointed by the city to investigate the cost of production of gas has reported that the city will net a clear profit of over 3,000,000 florins ($1,216,500) annually, should the price of gas be the same as the existing company is by contract permitted to charge.

Locust Plague in Cyprus.—Consul Germain, of Zurich, under date of August 30, 1897, says:

"The locust campaign of 1897" is the official description of the method adopted in Cyprus for securing a riddance of a plague that seems to have become established in that island. Some years ago it was the plan to burn, beat, and drive the locusts into pits; but in 1893 it was found that this was not enough. The suggestion was made that the eggs of the locusts be gathered and purchased at certain fixed rates. A parliamentary paper issued recently tells the

result. The price fixed was 16 piasters per oke,* and at this price 6,334 okes (18,078 pounds) were obtained. In 1894 and 1895, the same price was offered; but the eggs brought in fell to 4,738 and 1,186 okes respectively. In 1896, the price was raised to 20 copper piasters and eventually to 30 copper piasters; but the weight of locust eggs purchased at these prices was only 11 okes, and this year 50 piasters have been offered. It was found at the close of the 1896 season that the locusts were perceptibly disappearing, and this year the number was surprisingly small.

Dock Dues in Santos.—Under date of August 7, 1897, Consul Hill writes from Santos:

A point of interest to shipowners who send vessels to this port has arisen here in the case of the American bark *Virginia*, of Machias, Me., Pettigrew master, which is just clearing. The charter party contained a clause providing that the vessel should be free of wharfage. This was held here not to exempt her from the payment of the dues of the dock company, and Captain Pettigrew paid the bills of that corporation, amounting to nearly $300. I suggest that in charters of that character hereafter, the clause be inserted thus: "Free of wharfage and dock dues."

Bicycles, Typewriters, etc., in Nicaragua.—In answer to inquiries from the United States Export Association, New York, Consul O'Hara sends detailed statements from San Juan del Norte, dated August 3, 1897. The report, which was transmitted to the United States Export Association September 10, is in substance as follows:

Bicycles.—The Columbia, Waverly, and Pierce are the only bicycles in San Juan del Norte. There are no good wagon roads on this coast, and bicycling is confined to the streets and the sea beach. In many places, the sands make wheeling impossible. The moist atmosphere causes wooden rims to warp in a few weeks, and steel rims are the only ones that can be used. For the same reason, enamel is preferred to nickel plating. The consul quotes the opinion of an expert wheelman, that bicycles for Nicaragua should have low frames, not to exceed 23 or 24 inches, and should weigh from 22 to 25 pounds. The same authority says that the gear for men's wheels should be from 66 to 70. Care should be taken not to send saddles that are unpopular at home. Mr. O'Hara wrote recently to a bicycle

* The Turkish piaster is 4 4 cents and the oke 2.85418 pounds.

manufacturer, he says, that the establishment of agencies in Nicaragua would probably be followed by success. Several of the towns in western Nicaragua are quite populous, and many of the people are rich. The bicycle is practically unknown as yet out of the large cities, and the wheel itself must be seen before people will buy. Descriptive catalogues are useless. It would pay to send several bright young men, educated and well bred and expert on the wheel, to give exhibitions of the possibilities of bicycling. Agents who desire to introduce ladies' wheels must bring good letters of introduction. The sale of bicycles in Nicaragua will never equal that in the United States in proportion to the population, but earnest and well-directed effort will open a good market.

Typewriters.—There are but few machines in use. They sell for $100 (gold), and agents are allowed a discount of 25 per cent. The duty is 25 centavos per pound, including package, equivalent to 8.86 cents in United States currency. Four-fifths of the duty is remitted upon satisfactory evidence that the machine is in actual use.

Dynamite.—The United States furnishes all the dynamite and blasting powders imported into San Juan del Norte.

Church goods.—No store on the coast makes a specialty in this line. All the merchants keep general stores.

The importers of San Juan del Norte are F. A. Pellas, C. F. Bergmann, H. F. Bingham, Alfred Brand, and E. L. D'Souza & Bro. The importers at Bluefields are Samuel Weil & Co., New Orleans and Central America Trading Company, Brown & Harris, J. A. Belanger & Co., Chow Wing Sing Company, Wing Sang & Co., Allen & Caldwell, J. A. Petersen, H. R. Siegert, M. S. Lane, R. C. Lewin, and Bock & Hofman.

Bottle Stoppers in Nicaragua.—The following is sent by Consul O'Hara, of San Juan del Norte, under date of August 21, 1897:

A druggist here informs me that for this trade, owing to the moist atmosphere, pills, tablets, and many other articles in the drug line should have stoppers of either cork or rubber. For more than ten years he bought pills, tablets, etc., almost exclusively from a certain house in the United States, but is now buying largely from another establishment. No house in the world, he says, puts up better goods or prepares them in more attractive style than the first one mentioned. The house, however, has substituted hard-wood for cork stoppers, and, however popular and serviceable the new stoppers may be in some countries, they are unfit for this climate, where stoppers must be perfectly air-tight.

Earthquakes in Guadeloupe.—Consul Dart, of Guadeloupe, on August 26, 1897, writes:

I beg leave to report that we are having continuous shocks of earthquake of more or less severity. As an example, between 5 a. m. yesterday, the 25th, up to 7 a. m. to-day no less than eight distinct shocks, and four quite severe, have been felt here in Pointe-à-Pitre. It is a strange phenomenon, as no other parts of the island appear to be affected. There must be some local cause, as the shocks appear to come from southeast, which is out to sea.

National Museum at Managua.—Under date of August 30, 1897, Consul O'Hara writes:

I inclose translation of a decree providing for the establishment by the Nicaraguan Government of a national museum at Managua for the exhibition of the products of the country.

The President of the State, considering the general utility of the establishment in this city of an industrial, commercial, and scientific museum that is to serve as a place of study for natives as well as foreigners, exhibiting the natural, agricultural, commercial, industrial, and scientific objects of interest found in the country, and that said museum shall at the same time be used as a permanent exposition for the object of effecting the exploration and study of the territory under all its different aspects, decrees:

ARTICLE 1. To establish in this capital an industrial, commercial, and scientific museum to embrace all national products and articles of exportation duly classified and legally estimated.

ART. 2, To appoint Dr. David J. Guzman for the purpose of directing and organizing said establishment, and to establish the rules that are to govern such institute.

Electric Lighting in Belize.—The following has been received from Consul Morlan, dated August 27, 1897:

Inclosed herewith I send copies of the call for tenders and specification for an electric-light plant for the town of Belize.

The district board of Belize, the capital of British Honduras, invites tenders for the lighting by electricity of the town of Belize.

The system decided upon is that known as the three-wire, or neutral-wire, system and comprises boilers, engines, dynamos, accumulators, copper mains, flexible leads, iron lamp standards, switches, fuses, lamps glow and lamps arc, meters, etc.

Tenders should be addressed to and should reach Mr. A. R. M. Simkins, M. I. E., care of F. Otto, esq., Tower Chambers, Moorgate street, London, E. C. (telegraphic address, Helios, London), not later than the 20th of October, 1897, and should be inclosed in a sealed package marked "Tender for electric lighting."

The board does not bind itself to accept the lowest or any tender.

E. B. SWEET-ESCOTT,
Colonial Secretary, British Honduras, and Chairman of Belize District Board.

August 26, 1897.

REQUIREMENTS OF THE BOARD.

Plant to light lamps as follows:

Five arc lamps of 1,000 candlepower, 38 glow lamps of 32 candlepower, 38 glow lamps of 25 candlepower, 1,045 glow lamps of 16 candlepower, and should consist of three loco undertype steam engines, complete with all steam pipes, pumps, or injectors and so arranged by steam piping and valves that the steam in any one boiler may be transferred to the cylinders of either of the other engines.

Three 35-Kilowatt dynamos.

The engines and dynamos should be of sufficient power that any two engines and two dynamos working together at the same time shall suffice for the effective lighting of all the lamps.

Both engines and dynamos are to be fitted with the best procurable sight-feed lubricating devices. One switchboard (slate) properly fitted with the best quality meters and switches. Accumulators of sufficient quantity and power to light all the lamps for seven consecutive hours.

A supply of lead plates and acid sufficient to keep the batteries in working order for twelve months.

9 miles No. 4 B. W. G. High conductivity copper wire.

2,000 yards flexible cable, covered, of conductivity equal to No. 4 copper.

1 cwt. No. 16 copper wire.

7 arc lamps 1,000 candlepower.

Carbons for 1,000 to suffice for twelve months.

50 glow lamps 32 candlepower
50 glow lamps 25 candlepower } with reflectors.
1,150 glow lamps 16 candlepower

150 house meters.

One hundred and twenty-five 26-foot galvanized iron lamp standards with two arms or four brackets, with cast-iron switch and fuse boxes.

450 white porcelain insulators complete with bolts to fit arms or brackets on lamp standards.

54 porcelain shackles with straps complete.

56 pounds solder.

1 gallon soldering fluid for copper.

3 copper soldering bits, 3 pounds each.

2 complete blocks and tackles, for half-inch rope.

300 yards best manila hemp rope half-inch diameter.

3 wire vises.

3 devils claws.

500 switches.

500 fuses with spare wire.

250 feet best leather belting to suit engine driving wheels and dynamo pulleys.

72 copper rivets and washers for jointing belts.

18 gallons best lubricating oil.

3 cwts. waste.

Three 18 feet pine ladders, light and strong.

6 copper earth plates 4 feet square.

1 recording meter with 365—24 charts.

All articles to be inspected at the factory by an engineer to be appointed by the Belize district board before being accepted.

E. B. SWEET-ESCOTT,
Colonial Secretary, British Honduras, and Chairman of Belize District Board.

August 26, 1897,

Weaving in Japan.—Consul Morris, of Ghent, on August 23, 1897, says:

According to a report made by M. Gouderau, the French consular representative at Yokohama, the weaving industry in Japan during 1896 was followed as a trade in 660,408 dwellings or establishments containing a total of 949,123 looms. Of 1,042,866 persons engaged in this industry, 57,850 were men and boys, while 985,016 were women and girls. The total value of textiles produced included:

Silk textiles	$46,471,401
Silks and cotton (mixed) textiles	10,281,272
Cotton stuffs	37,083,757
Hemp stuffs	2,021,467
All other textiles	329,938
Total	96,187,235

The province of Aitchi (Nagoya), with 42,032 houses containing looms, was the most important, and then followed in order the provinces of Kumoto, Saitama, Kagoshima, Elimie, Shumane, Jamaguchi, Oita, Nagano, and Nugata. For the number of looms and persons employed, the province of Aitchi also holds the first place with 84,104 looms and 86,054 individuals.

Kioto, although having a very small number of establishments, is second for the number of its workmen; this fact being due to the existence of very large factories employing many workmen. Kioto, too, was the province showing the greatest value in production ($15,885,830) of tissues of silk and of silk and cotton mixed. For pure cotton textiles the province of Aitchi is the first with $5,832,265. The province of Shigo produced the greatest quantity of hemp cloths.

Bicycles in Hawaii.—In answer to an inquiry from a New York house, Consul-General Haywood, of Honolulu, writes under date of August 18, 1897, as follows (the letter was forwarded to the inquirers, September 10, 1897):

The roads around Honolulu, where all the wheeling is done, are very good. The climatic conditions are favorable to wheeling. It is not as warm here as it is in the summer in the United States. The same temperature practically prevails all the year around. The American bicycle is the only one sold here. It is estimated that 1,500 bicycles are owned here, the population of possible riders being placed at 5,000. The duty on bicycles is 10 per cent. The retail price, since the reduction, is from $85 to $100 for standard high-grade wheels. The following makes are sold here: Cleveland, Imperial, Waverly, Columbia, Stearns, Eldridge, Sterling, Moline, Syracuse, Tribune, Columbus, Zimmy, Sylph, and Overland.

A Great Market for Ginseng.—The following is taken from the annual report of Consul Johnson, dated Amoy, China, July 29, 1897:

I wish to call especial attention to an article now imported from the United States to a limited extent and from Korea—ginseng. It is a native of Colorado, Wyoming, Utah, as well as other mountainous districts of America,* also of Korea and northern Asia. I do not exaggerate when I state that it is possible to market annually in China $20,000,000 worth of these roots. They are now being cultivated in the United States to a limited extent, and prices obtained by the grower are entirely out of proportion to those realized by the thrifty exporter. It sells in Amoy at a price from $25 to $35 (Mexican) per pound. It costs in America from $2 to $3 in gold or $4 to $6 in Mexican currency. Yet at these figures Amoy handled during 1896, 109,823 haikwan taels' (or $88,517.34 in United States gold) worth of these roots from America alone. From Korea the value of 54,867 haikwan taels, or $44,222.80 (United States gold), was imported. The Korean article is much higher priced and more skillfully cured, although not otherwise superior in quality to the American product. It was formerly bought from the Americans by Chinese dealers at a few cents per pound, and is still regarded as a profitable crop. The discovery that the Chinese were making fortunes from these purchases caused an advance in the price; but the real facts and possibilities in this line seem never to have dawned upon the struggling farmers in the mountainous districts of the United States which are so well adapted to the growth of the plant. I have searched in vain for a report upon the subject which afforded any idea of the field open here for American enterprise.† It seems to me that if our people realized that at least $3 in gold could be fairly demanded by the grower for every pound of well-cured roots, and that the market would be practically unlimited, a new mine of wealth, affording employment for a large population, would be opened.

The ginseng, a plant of the genus *Aralia*, somewhat resembles the horse-radish root. It grows wild in the mountains. The species *A. Quinquefolium* is the article of export. It is used as an invigorating tea by all the wealthy Chinese and as a medicine by the native physicians. It enters largely into the list of presents sent by the wealthy to friends and the articles exchanged between high officials.

* Including also West Virginia, Ohio, and Minnesota.

† A series of reports, eleven in number (in answer to a Department circular), and covering all phases of the subject—trade, uses, cultivation, etc.—will be found under the general head of "The Ginseng Trade in China" in CONSULAR REPORTS No. 46, pp. 223-241. A report upon the cultivation of ginseng in Japan is printed in CONSULAR REPORTS No. 40, p. 257, and another upon the cultivation of ginseng in Korea will be found in CONSULAR REPORTS No. 65, p. 251.

It is bought by the middle classes throughout the entire Empire, and even the poor peasants give up their hard-earned silver for this national panacea.

I hope that these facts will be brought to the attention of the chambers of commerce throughout the districts mentioned, in order not only that the possibilities may be disclosed, but that knowledge of the prices may be disseminated, to protect those who most need the benefits to be derived from the industry.

Imports of Clocks into the Straits Settlements.—Under date of July 31, 1897, Consul-General Pratt sends the following report from Singapore. The information was requested by the American Waltham Watch Company, Waltham, Mass., and the report was transmitted to them September 28.

Imports of clocks and watches into the Straits Settlements.

From—	1895.		1896.	
	Mexican.	United States currency.*	Mexican.	United States currency.*
Austria	$120	$60	.....	.....
Belgium	3,600	1,800	$1,450	$2,220
Bombay	.....	.....	195	90
British North Borneo	.....	.....	200	100
Calcutta	.....	.....	1,200	600
China	.....	.....	1,500	750
Egypt	850	430	.....	.....
France	38,355	19,400	33,234	16,600
Germany	16,407	8,300	18,305	9,150
Holland	430	220	120	60
Hongkong	29,872	14,930	21,417	10,700
Italy	200	100	350	170
Japan	20,642	10,320	16,488	8,240
United Kingdom	11,675	5,830	13,503	6,750
United States:				
Atlantic	3,420	1,760	5,346	2,670
Pacific	1,400	700	....	.....
Total	127,011	64,850	116,308	55,800

* Round numbers.

Steamship Service between New York and Singapore.—Under date of July 1, 1897, Consul-General Pratt, of Singapore, calls attention to a previous report in which he advocated the establishment of a direct steamship line between the Straits Settlements and New York (see CONSULAR REPORTS No. 177, June, 1895, p. 210).

The consul-general says that in April, 1896, a direct service was inaugurated, to be continued at fortnightly intervals. The manifest of one of the steamers is inclosed and another is sent under cover of a report dated July 24, 1897. The articles imported at Singapore include iron safes, freezers, hardware, stoves, pumps, refined petroleum, drills, bolts, iron pipe, well supplies, boilers and appliances, rope, firearms and cartridges, jewelry, whistles, bicycles, pens, shoe dressing, scales, ice molds, smoking tobacco, axes, yellow pine, sewing machines, perfumery, merry-go-rounds, phonographs, lawn mowers, bird cages, and miscellaneous tools. Iron pipes, well machinery, and boiler appliances were the chief articles.

United States Bacon and Leather in England.—Consul Lathrop, in his annual report dated Bristol, September 21, 1897, to be printed in Commercial Relations of the United States for 1896–97, says:

The United States, Denmark, and Canada supply Great Britain with its imported bacon. These countries contribute among them the large amount of over 4,000,000 cwts. of 112 pounds of the approximate value of $40,000,000. The United States retains each year more than half of this large trade, contributing, in 1896, 2,751,518 cwts., Denmark supplying 1,200,000 cwts., and Canada, 500,000 cwts. During the first six months of 1897, United States shipments made a large proportionate increase, amounting to 1,830,162 cwts; Denmark held her own with 551,710 cwts., and Canada fell to 106,791 cwts. A temporary scarcity of hogs, not only in the two last-named countries, but in England also, will account, primarily, for the changes. In Bristol, the bacon imports amount to about 150,000 cwts. per annum. Exceptional circumstances as to ocean freights may result in considerable importations via Liverpool. Large houses are engaged in the business here and cover a broad area in their trade, sending all through South Wales, through the west and south of England, to the east within 40 miles of London, and north as far as Birmingham.

The conditions here in the close neighborhood of the Wiltshire factories, which turn out the finest grades of English bacon, are such that the immediate local market for United States bacon is more limited than would be the case in a similar population in the north of England, where public taste is less exigent; but large quantities of United States bacon are sold at a price to which I wish to draw careful attention. At the present moment, when the finest grades of English bacon are quoted as from 15 to 17 cents per pound

(wholesale), and Canadian or Danish at about 11 to 14 cents, United States bacon is selling at from 6½ to 8 cents. These differences in price are constant. Our highest prices do not even touch the lowest quotations for Canadian and Danish; they are half the English price. In other words, we are not getting by close on half what we might get for this great product of the West. The reasons for this are worth consideration; it may pay to stop and ask why, year after year, we are content to rest at the bottom of the market.

The difference in values is the result, of course, of the difference in quality and in suitability to the taste of the market. Canada and Denmark have made a most careful study of the demands of the English market and have gone deliberately to work to meet the demand, with a success thoroughly deserved. We, on the other hand, have disregarded entirely the taste of the consumer; and we find depreciated values our deserved punishment.

I am quite aware of the argument of the packer. He says in substance that Canada and Denmark have a vital dependence upon England's patronage; that they must make specially for that market, but that he makes for a domestic market which, in the South and Northwest, depends largely upon fat bacon and is entirely uncritical as to quality; that he can not obtain in local markets more money for one class of bacon than for another; and that he is satisfied with his domestic market, what he sends abroad being the surplus that he can not get rid of at home. He will dwell further upon the impossibility of getting a constant and regular supply of the proper hogs. The hog, he will say, is fed on corn, and you can not get the farmers to do otherwise.

Now, this may be true for the large packer, but I am not appealing to him. I am appealing to the man who can see a profit in selling his bacon in England at 12 cents a pound (as many Canadians have done) while his fellow-countrymen are satisfied with 8 cents. He would have to begin at the beginning, that is to say, he must change the type of hog. He would find the importing of some Tamworths the best way of doing this. Some boars of this lean and sweet-fleshed breed would rapidly effect a change in the hog in a district, and the new type could be fixed by care in feeding, the main thing being not to feed on corn. No corn-fed pig will make bacon satisfactory to the English consumer. Firm flesh, firm fat in limited quantity, can not be obtained from corn. Once the desired type is obtained, the curing is an easy matter. The singed side would probably be found to be most satisfactory cut for the market; and it should be sent forward in borax, not in salt. A packer who will take the trouble thus to study the English market and will patiently and carefully strive to meet its requirements will

find that his brand is speedily established, and that dealers will be eager for his wares at remunerative prices.

During the year 1897, our western manufacture of fancy leathers has made an appreciable advance in favor in England. The colored leathers of Chicago and Milwaukee and contiguous districts have been more largely sold at prices relatively better than standard lines have made. The glacé goat and sheep leather from Philadelphia and the Pennsylvania district has also found an enlarged market, almost entirely at the expense of the French and German manufacturers. We have supplied a better article at a less price; hence we are doing the business. There has also been an improvement in fancy leathers for shoe purposes sent from Newark, N. J.

On the other hand, coach and harness leather from Newark and its neighborhood has not yet been able to gain a footing in England, notwithstanding vigorous and determined efforts. Coach and harness makers say that up to now the English leather suitable for the purpose is better value for the money. The same statement is made with regard to the oak tannages of the Southern States and the union tannages of sole leather. These have been pushed, but do not make headway. There are other leathers which, in their way, are cheaper and equal in quality. Our shipments of calf kid have fallen away very much; but this is merely the unavoidable result of a change of fashion. It is comparatively little used and can be sold only in limited quantities. Among our competitors, in a limited way in the English market, is Mexico. Some leather of most excellent quality, held to be very good value, is coming from there. Shipments of sole leather from Canada are steadily increasing, though there is a falling off of the import of their upper-leather stock.

Declared Exports from Nottingham.—Under date of September 14, Consul Dickinson transmits the following comparative statement showing the value of exports declared at Nottingham for the United States during the first six months of 1896 and 1897:

Month.	1896.	1897.	Increase.
January	$461,449.65	$539,557.74	$78,108.09
February	335,141.85	365,929.74	30,787.89
March	578,878.63	696,498.86	117,620.23
April	233,161.95	412,941.44	179,779.49
May	189,445.15	316,243.57	128,798.42
June	374,404.54	560,686.55	186,282.02
Total	2,172,481.77	2,891,857.90	721,376.14

Proposed Government Ownership of Railways in Switzerland.—Minister Leishman writes from Berne under date of September 13, 1897:

During the meeting of the Swiss Federal Assembly in June and July last, a resolution was passed by the Staende Council, recommending the purchase of the railways by the Swiss Government; also recommending a national insurance policy. A special session of the Federal Assembly has been called for September 20, in order to consider the purchase of the railways, since the regular meeting in December would not give the necessary time. The purchase of Nordostbahn, the Jura Simplon, and the Schweiz Centralbahn must be decided by February 26 and April 30, 1898; otherwise, the Government's option would be postponed for five years, according to the contract. Since, by the Swiss law, a bill passed by the Federal Assembly does not become a law until after the expiration of ninety days, in order to give the people an opportunity to disapprove (thirty thousand signatures of voters on the referendum making it necessary to bring the matter before the people for public vote), it was necessary to call an extra session.

The present plan involves the purchase of the five principal railway lines, in regard to which the following statement is made:

Railway.	Government estimate of value.		Length of road.	
	Francs.		*Kilometers.*	*Miles.*
Jura Simplon	288,154,203	$55,613,761	985	612
Nord Ost	244,434,347	47,175,828	684	425
Central	177,357,946	34,230,083	327	204
Vereinigte Schweizerbahnen	81,858,645	15,798,717	279	173
Wohlen Bremgarten	208,446	40,230	1.3	0.8
Gotthardbahn	172,371,182	33,267,638	266	165
Total	964,384,769	186,126,257	2,542.3	1,579.8

This is about 100,000,000 francs ($19,300,000) less than what is claimed by the railway companies.

The general plan of the Swiss Government is to purchase the railways at twenty-five times the average net annual earnings for the past ten years, providing this is not less than the actual cost. The companies have the privilege of deducting surplus capital, but must turn over the roads in first-class condition. It is on this point that trouble will probably arise, the Government claiming that first class means practically new, while the railroad companies claim it means that the roads shall be in good operating condition. If the bill becomes a law, the matter will probably be referred to the federal courts for adjustment.

From what I can learn, the chances are in favor of the bill pass-

ing, as the present administration (Liberal) approves of a measure that would naturally be a source of strength (there being over 25,000 employees). While the conservative element will oppose it, and may even be able to muster the thirty thousand signatures necessary on the referendum to submit the matter to public vote, a large majority of the laboring classes will no doubt support it. The sentiment among the masses is that Government control means increased pay, a larger number of employees, lower fares and rates of freight, and more improvements.

The insurance measure is attracting considerable attention; but it is not so popular with the masses, and the possibility of its becoming a law is not strong.

United States Trade with French Switzerland.—Consul Ridgely, in his annual report, dated Geneva, September 22, 1897, which will appear in full in Commercial Relations, 1896–97, says:

The consular district of Geneva comprises the important French-speaking cantons of Switzerland. French Switzerland, however, never had anything like the commercial importance of German Switzerland, and its trade with the United States has always been comparatively small. Formerly, there were large exportations of watches and musical boxes; but this trade with the United States has steadily fallen off in recent years, until, in 1896, the exportation of watches represented only about two-fifths of the volume of 1886 and the exportation of musical boxes only about half. The total value of declared exports to the United States in 1896 was $402,-625.18. In 1886, the total amount was $793,409, and in 1882, it was $1,179,611.

It is interesting to observe, however, that during the first six months of 1897, there was some considerable revival of these exportations to the United States, particularly in watches. The increase, however, occurred only in the June quarter, that is to say, for the three months ending June 30, as the following figures compiled from the record of exports at this consulate will show:

Watches exported to the United States.

Quarter ending—	1896.	1897.
March 31	$21,633.86	$16,516.24
June 30	25,740.90	43,699.53
Total	47,374.76	60,215.77

The larger volume of exports during the June quarter was evidently due to the anxiety of the exporters to get their goods in before

the passage of the new United States tariff bill, and it may be remarked, incidentally, that there was a considerable increase of goods sent in consignment.

In spite of these larger exports, the exporters here are complaining, and declare that their trade with the United States is not improving and is not satisfactory, although some of them admit that the outlook is more promising than it was a year ago. Other than watches and musical boxes, the exportations from this district to the United States are inconsiderable. Manufacturers and exporters of this district, meaning particularly manufacturers and exporters of watches and musical boxes, are not only not satisfied with the trade with the United States, but they complain that business in general has been unsatisfactory during the present year. This feeling exists still more strongly among the shopkeepers of Geneva, tradesmen who, in past years, have driven a flourishing trade with tourists and particularly with Americans. This year, there has been general complaint, not only that the Americans have come in smaller numbers than usual, but that those who have come made comparatively insignificant purchases. I mention these facts here merely to show, in the absence of statistics, which are not to be had at this time, what the trade feeling is.

In the absence of reliable figures (there are absolutely none to be had for the moment), it appears, from the best information available, that there has been a very large increase this year in the number of bicycles imported from the United States and sold in this district; but, unfortunately for this trade, there has been too much of an effort to push the cheap-grade machine, and the market, for the moment, does not seem as promising as it did at this time last year. However, some of the principal American makes have taken a strong hold here, and it will be difficult to dislodge them.

There has also been considerable increase in the sale and importation of United States canned meats, and I do not doubt that the business will continue to grow in French Switzerland, as will also the importation of American dried fruits. I am convinced, indeed, that it would be well worth while to push the market for the last-mentioned United States products, not only here, but throughout Switzerland. Recently, through the agency of this consulate, the beginning of what promises to be a large direct importation from New York and California has been brought about. Already, 2,000 boxes of California dried fruits have been imported during the past month, and large orders are being sent for further importations.

It may also be remarked that there is a small but growing demand in this district for United States sole leather, and also for leather for uppers.

Commercial Conditions in Spain.—Consul-General Bowen sends from Barcelona, under date of September 21, 1897, an annual report on the commerce of Spain, which will appear in Commercial Relations, 1896–97. A few paragraphs of current interest are extracted. After giving details as to imports and exports, the consul-general says:

From the foregoing figures, it would seem that Spain's trade has not yet been very seriously affected by her military operations in Cuba and the Philippine Islands; still, there would be a very apparent decrease in the totals of exportations if the amount of supplies of all kinds sent out to the Spanish troops could be ascertained and deducted from the totals. This can not, however, be ascertained; and therefore, until the Cuban trouble is ended, all statistics of Spain's trade must be accepted as somewhat misleading.

In conversations I have had lately with commercial travelers of foreign countries, I have learned that there is considerably less demand for foreign goods in Spain than there was a year ago, and that the outlook for trade is not very exhilarating. United States exports to Spain consist principally of cotton, petroleum, and staves and amount, in normal times, to about $18,000,000. During the present year, it seems likely that they will not amount to more than $14,000,000. There is but little disposition shown by the Spaniards to buy our agricultural implements or our machinery. Our wheat they consider too fine, and such quantities as they import they mix with Russian wheat, which is coarser and, in their opinion, quite as wholesome. They consider our bicycles, on the other hand, the best obtainable in the world; but, as ours are more expensive than the English, French, and German bicycles, comparatively few are imported here. It can hardly be said that bicycling is popular in Spain. It doubtless would be if Spanish women regarded wheels with favor; but they do not, for reasons consonant with their views of propriety, and therefore, as opinions change here very slowly, it is not likely that wheeling will be fashionable for several years to come.

Besides the question of price that often deters Spaniards from buying foreign goods, there are also the questions of tariff and exchange which they have to consider. Spain has a high protective tariff, and it operates adversely to United States interests, as we have no treaty with Spain according us the privilege of the lower rates of duties. As for the question of exchange, it is a serious one. Gold is at a premium of over 30 per cent. Seven years ago, 100 pesetas in Spanish silver or paper could buy 100 francs' worth of French goods. To-day 130 pesetas would have to be paid for them. There is practically no gold in circulation in Spain. Silver, paper,

and copper (all on a par with one another) are the only moneys actually used in local commercial transactions and in the custom-houses. Exchange being so high, the prices of food and of living are of course affected, and the general tendency is now to advance the prices of all commodities. Certain English, German, and French firms have, during the last two years, established factories in Spain so as to meet the peculiar economic conditions here more advantageously than they could by shipping their goods from their home houses, while other foreign firms, anxious to maintain their trade, send representatives here to study the situation and to make such concessions, in regard to price and time of payment, as they think satisfactory to their customers and compatible with their own interests. United States exporters should therefore understand that, except as to the quality of their goods, they are at a disadvantage in Spanish markets, and that they can compete with the English, Germans, and French only by the expenditure of much energy, time, and patience, and that even then, the chances will be against their doing a large trade, as superior goods are not now in such great demand in Spain as cheap goods.

United States Machinery and Tools in Germany.—Consul Crane sends from Hanover, Germany, under date of September 17, 1897, a report which will be published in Commercial Regulations, 1896–97. An extract therefrom of current interest is as follows:

The principal enterprise now on foot in the department of transportation is the extension of the net of electric lines far out of the city, to Hildesheim, 14 miles away, and the engraftment thereupon of not only a light, but also a heavy, freight traffic. It would not be surprising should wide-awake representatives of United States firms interested in such constructions find that there are devices at their command which the Germans would be glad to adopt.

In this connection, it may be remarked that the frequency of railway disasters in this country of late has awakened public attention to a degree that might be suggestive to some of our United States inventors and manufacturers of railway appliances. In an incident of this kind that occurred near here but a few weeks ago, one of unusual severity in its consequences, it was frankly admitted that had not the American air brake operated perfectly, the loss of life must have been much greater. To take advantage of such a hint as this, the parties interested must be on the ground, and for a long time, too, in order to make investigations on their own account and in their own way, as opposed to the manner in which official investigations are conducted.

In one department, the superiority of United States products seems to be ungrudgingly admitted, i. e., in tools. A prominent piano manufacturer here will use none other than those of American make. The same general statement holds of dental tools, engines, and chairs. United States nails and wood screws (iron and brass) are of much better quality than those made here. The former can be driven; the others have to coaxed into place, being of too soft material.

In the way of miscellaneous suggestions, I would add that United States flour would be very welcome here; but a duty of about $2.35 per barrel has to be reckoned with. Oatmeal of American preparation has at last made a stand here and is everywhere to be had; it is to be wished that other "breakfast cereals" were more generally brought to notice by being placed within easy reach. I was glad to see American popped corn offered at the last Schuetzenfest, and apparently with some success. Enterprising delicatessen dealers have now and then offered us sweet potatoes, but at prices that make them simply tantalizing. Possibly the public taste could be educated to a demand for bananas; up to the present, they are offered in the show windows with placards to explain what they are held to be good for.

It should of course be understood that the introduction of any article, and especially an article of food, requires large capital, tact, and time; but the crushed-oats people have proved that it can be done, and I sincerely hope they are reaping a handsome return.

Lead Pencils in Germany.—Consul Black, of Nuremberg, Bavaria, under date of September 18, 1897, sends a report to be published in Commercial Relations, 1896–97, in which he says:

Nuremberg and its neighborhood is the chief place for the manufacture of lead pencils in Germany. The factories have all been fairly well employed of late years; at the same time, prices have been considerably cut by not only home, but foreign, competition. The manufacturers complain that one of the chief causes of the home competition is the low rate of duty levied by the Empire on these goods—20 marks per 100 kilograms ($4.76 per 220.46 pounds) upon lead and colored pencils—while other countries, like the United States, Russia, Austria, Italy, and France, have placed an enormous tariff on this class of manufacture. The United States is especially complained of in this respect, and I have heard it declared that the present high rate of duty levied by our country means almost the exclusion of foreign-made pencils from the United States, and that

those that are exported thither can only be of the higher grades, the make of well-known firms, whose brands are demanded by American customers because, it is claimed, they are of a better quality than any that are made in America.

From what I learn, I am inclined to believe that the lead-pencil manufacturers of the United States are making considerable inroads into the foreign business of the German manufacturers, especially in the cheaper grades, and that they are shipping their goods in large quantities, not only to England, but also to South America, India, and Japan. The competition of Russian and French makers is not so much felt, as they do not produce so largely as those of the United States; but Austria, England, and Italy have some factories which are able to compete successfully with those of Germany.

United States Periodicals in Canada.—Consul Linsley, in a report dated Coaticook, September 30, 1897, to be printed in Commercial Relations, 1896–97, says:

Several years ago, it was impossible to procure United States periodicals and magazines here except by subscription. To-day, all of the leading United States periodicals, magazines, illustrated papers, and similar publications are on sale and freely purchased, as a result of the enterprise of a Montreal news company. I believe, if the sale of United States newspapers—and especially the great metropolitan dailies—could be successfully pushed in this country, it would result in attracting a largely increased demand for United States goods, through the medium of the advertising, not contained in the Canadian press. The Canadian consumer would in this manner be brought constantly into close touch with the United States, its institutions and products. So far as I am able to ascertain, not a United States daily newspaper is to be found on sale in this vicinity or, indeed, this side of Montreal. How to work up a demand for these papers is a problem for the press. Possibly, the attempt has been made and has failed. If so, the reason for failure should be carefully considered and an effort made to overcome it. To make a United States paper interesting to Canadians, reasonable space would have to be devoted to Canadian interests. With proper train service, it would be possible to place the Boston and New York morning dailies on sale at most of the railway stations in this province on the day of publication. The few that reach here by mail come irregularly, and, as a rule, are not received until from twenty-four to thirty-six hours after publication.

United States Trade With Santo Domingo.—The following items of current interest are extracted from the report of Consul Grimke, of Santo Domingo, dated September 14, 1897, which will appear in full in Commercial Relations, 1896–97:

United States houses have recently extended the terms of their credits for Dominican merchants, so that to-day they run from two to four months instead of, as formerly, from two to three months. European houses offer yet more liberal terms in this respect, their credits extending from six to nine months. It seems to me, however, that the United States terms, if not more advantageous to Dominican purchasers, are considerably safer for the sellers. The coarser cotton cloths, used for shirting, etc., by the poorer classes, come almost wholly from the United States. On August 16 last, a railroad about 45 miles long, connecting Puerto Plata and Santiago in the interior, was formally opened to traffic. On August 9 last, a new tariff tax of 3 per cent on the total customs receipts was enacted, the same to be collected on the entire import and export duties of the country.

Gold Settlements in Nicaraguan Trade.—Consul O'Hara, of San Juan del Norte, Nicaragua, under date of September 8, 1897, transmits a report from M. J. Clancy, consular agent at Bluefields, as follows:

The merchants here have adopted the gold standard. Prices will be given in silver for goods sold for cash; but, in the case of credit, every charge is to be in gold, and either gold or its equivalent, will be exacted at the time of payment.

Sugar Crop of British Guiana.—A report from Consul Patterson, of Demerara (Georgetown), British Guiana, September 15, 1897, says:

From careful inquiries made by letter and verbal communication with a great many of the largest planters and buyers of sugar, I have the honor to report the condition of the sugar crop of this colony about as follows: A majority report the crop about the same as last year. Some say it will be slightly larger, and a few claim less; but, taking all the information obtainable, I am of the opinion the crop will equal at least that of last year. With the exception of the county of Berbice, which suffered some on account of dry weather, the season has been very favorable. May, June, and July, about 15 inches of rainfall per month; August and September, to the present time, copious showers and sunshine. Grinding has

already commenced on some of the estates, and by October 10 all estates will be grinding. I find a few estates will make (or, rather, claim they will make) yellow crystals for the English market, but the majority will continue to make dark crystals for the United States.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
Carlos Gardini, Bologna	July 24, 1897	Hemp cultivation	Department of Agriculture.
Robert F. Patterson, Calcutta.	.....	Indian Government crop reports.	Do.
George R. Ernst, Reichenberg.	Aug. 21, 1897	Crop of Bohemia for 1896	Do.
Eugene Germain, Zurich	Aug. 31, 1897	The world's largest libraries.	Commissioner of Education.
Do	Sept. 1, 1897	Zurich International Labor Congress.	Department of Labor.
Henry C. Morris, Ghent	Sept. 4, 1897	Flemish harvest of 1897	Department of Agriculture.
E. Schneegans, Saigon	Aug. 7, 1897	Rice market	Do.
Samuel Comfort, Bombay, India.	.....	Agricultural reports by the Government of India, 1897.	Do.
E. Schneegans, Saigon	Aug. 21, 1897	Rice report	Do.
Newton B. Ashby, Dublin	Sept. 13, 1897	Irish agricultural report	Do.
		Annals of agriculture, 1884, 1886, 1888, 1893, 1895, Italian Government.	Do.
Lee Bergholz, Erzerum	Sept. 6, 1897	Swedish butter in Great Britain.	Do.
George Horton, Athens	Sept. 21, 1897	Public education in Greece	Commissioner of Education.
John Karel, St. Petersburg.	July 27, 1897	Wages and agricultural machinery in Russia.	Department of Agriculture.
Do	....do	....do	Department of Labor.
Do	July 19, 1897	New method of retting and drying flax.	Department of Agriculture.
Thomas W. Fox, Plymouth.	June 30, 1897	Agriculture and trade in Plymouth.	Do.
Geo. W. Roosevelt, Brussels.	Aug. 10, 1897	Strikes in Belgium	Department of Labor.
Lorin A. Lathrop, Bristol	Sept. 21, 1897	United States products in England.	Department of Agriculture.
Frank H. Mason, Frankfort.	.....	Cooperation in German sugar production.	Do.
Julius Muth, Magdeburg	.....	....do	Do.
Robt. J. Kirk, Copenhagen	Sept. 15, 1897	American horses in Denmark.	Do.
John Karel, St. Petersburg.	Aug. 11, 1897	Cattle market in Russia	Do.
Thos. E. Heenan, Odessa	Aug. 9, 1897	Failure of crops in Russia	Do.
H. S. Brunot, St. Etienne	Sept. 15, 1897	Wheat harvest in France in 1897.	Do.
Louis H. Brühl, Catania	Aug. 24, 1897	Crops in Sicily and Calabria	Do.

Opening for Indian Corn and Barbed Wire in Canada.—Consul Shaffer sends his annual report from Stratford, Canada, under date of September 28, 1897. An extract from the report, which will appear in full in Commercial Relations, 1896–97, is as follows:

Under the new tariff regulations, the duty will be removed from indian corn and barbed wire after the 1st of January next; and, as corn will not ripen properly in this district, I look for a large import in the near future both in corn and barbed wire.

FOREIGN REPORTS AND PUBLICATIONS.

The Textile Industry in Germany.—The Moniteur Officiel du Commerce, Paris, June 3, 1897, says:

The textile industry has perhaps made more progress than any other German industry during the last ten years. Raw materials must be imported, and the following figures show the quantity brought into the country in 1896: Cotton, 281,489 tons; wool, 170,245 tons; linen, 54,186 tons; hemp, 45,924 tons; jute, 98,845 tons; raw silk, 5,214 tons. Within the last sixteen years the importation—that is to say, the general consumption—has almost doubled for cotton and has tripled for wool. The import of linen is one-third greater, that of hemp has increased 5.7 per cent, that of silk has doubled, and that of jute is five times as much. The consequent increase in manufactured objects is shown in larger native consumption and in the exports, which were as follows during the past year: Articles of cotton, 34,344 tons; of wool, 32,612 tons; of flax and jute, 4,442 tons; of silk and half silk, 4,710 tons. In the past seven years, the export of cotton and woolen goods has more than doubled, and that of silk goods has almost tripled. The value of the cotton exports was 174,487,000 marks ($41,527,906), divided among the countries as follows: Central and South America, 8,809 tons; Great Britain, 6,478 tons; United States, 5,431 tons; Holland, 2,296 tons; Switzerland, 1,434 tons; Belgium, 1,350 tons; France, 1,073 tons.

The value of the export of woolen goods was 216,276,000 marks ($51,473,688), and the countries which were the largest purchasers were: England, 5,423 tons; United States, 4,027 tons; South and Central America, 3,625 tons; Switzerland, 2,623 tons; Holland, 2,258 tons; Belgium, 1,154 tons; Austria, 1,145 tons; France, 999 tons.

The silk goods exported reached the value of 122,446,000 marks ($29,142,148), and, according to country, the export was as follows: United States, 1,438 tons; England, 1,314 tons; Belgium, 262 tons; Holland, 232 tons; Sweden and Norway, 134 tons; South America, 135 tons; Austria-Hungary, 124 tons; Switzerland, 122 tons; France, 331 tons.

Belgian Enterprise in Foreign Countries.—In the Moniteur Officiel du Commerce, Paris, July 1, 1897, the following appears:

A recent report from the Ministry of Foreign Affairs gives a list of the joint-stock companies recently organized, which shows the development of Belgian industry abroad. There are six railway companies in Spain, with a total capital of 17,000,000 francs ($3,281,000); a mining company in Spain, one in Portugal, and one in Italy; a tramway company in Servia, one in Athens, two in Germany, and two in Italy; a tramway company and a railway company in Egypt; a railway company, a sugar factory, a glass factory, and an industrial society in Persia; a railway company in Mexico; a water company in Venezuela; a railway company in Brazil, with a capital of 25,000,000 francs ($4,825,000); fourteen companies for the exploitation of the Kongo, agricultural, railway, commercial, maritime, etc., with a com-

bined capital of 45,950,000 francs ($8,868,350); and over fifty companies engaged in Russian industries, comprising four for coal mining, three metallurgical, seven for tramways, four electrical, two for naval and mechanical constructions, and others for mining, for making matches, for chemical and ceramic industries, etc., the united capital of these companies representing nearly 200,000,000 francs ($38,600,000). All the above-mentioned companies have been created within the past three years, and others existed before that date. It can not, of course, be said that this money is Belgian capital exclusively, for there are many foreign stockholders, especially in Russia. On the other hand, some of these organizations have increased their capital, and the list is far from complete as to numbers. No definite data can be obtained from Turkey, although Belgians have received several important concessions there for lighting and waterworks. Chile, the Argentine Republic, France, Hungary, the Netherlands, and Algeria have also been perforce omitted, although there are companies in all these countries for developing the mineral, agricultural, commercial, and forestry resources. The report is made in order to convey an approximate idea of the importance of Belgian investments in other lands.

Commerce of Iceland.—From the Moniteur Officiel du Commerce, Paris, June 10, 1897, the following report is taken:

The total exports from Iceland during the year 1894 amounted to the value of £371,522 ($1,808,011), and the imports to £344,748 ($1,677,817). As might be expected in a country which produces little but cattle and fish, the imports covered most of the articles necessary to existence. The inhabitants live chiefly on fish, mutton, beef, and milk and clothe themselves with the wool from their flocks. All the rest comes from without. Cereals constituted the most important import. As in all Scandinavian countries, more rye is consumed than any other cereal. During 1894, £14,000 ($68,131) worth was brought into the country. Barley and rice are next in order of importance. Coffee is largely imported—£24,000 ($116,796) worth. It is of cheap quality and, as well as sugar, comes chiefly from Denmark and England. Spirits come from Denmark, cotton goods (£18,000=$87,597) from England and Germany, and cutlery and ironware from England and Germany. The English articles are of better quality, but the cheapness of the German products insures their sale. There being no trees in Iceland, wood is imported from Norway—£12,000 ($58,398) worth during the year under consideration. Salt (used for the fish), coal, and petroleum come from England. The importation of the respective articles in 1894 was £20,000 ($97,330), £13,000 ($63,254), and £4,500 ($21,899). Another English article for which there is a growing demand is galvanized corrugated iron, used in construction.

The principal articles of export are codfish, herrings, whale oil, salt mutton, wool, and live animals. For many years live sheep have been sent to England, the annual export averaging 60,000, with a value in Iceland of £45,000 ($218,990). Ponies have also been exported to the value of £5,000 ($24,325) for use in the coal mines; but recently this number has decreased, and the import of live sheep into England has been prohibited, resulting in serious injury to the iudustry. Wool goes almost entirely to England. The export in 1894 was £57,000 ($275,390). Salt fish represents about half the value of the total exports. The cod goes to Spain; small cod (less than 18 inches in length) is sent to English, Irish, and Mediterranean ports. Salt herrings are obtained on the eastern coast and are sent to Norway—£10,000 ($48,665) worth in 1894. The export of cod-liver and shark-liver oil is becoming an industry of some importance. A number of boats are exclusively

engaged in catching fish for this trade. Whaling stations have been established by Norwegians on the western coast, and a large quantity of whale oil is exported, amounting in the year named to the value of £37,000 ($178,060).

Wood in Norway.—In the Moniteur Officiel du Commerce, Paris, July 8, 1897, is the following:

For many years the commerce in wood has not been so satisfactory as during 1896. There were exported 1,846,098 cubic meters,* against 1,674,574 cubic meters during 1895. Over half of this amount was planed or sawed. Of staves, 92,541 cubic meters were exported. The importing countries were as follows: Great Britain and Ireland, 1,127,902 cubic meters; Belgium, 125,012 cubic meters; Holland, 119,919 cubic meters; France, 119,026 cubic meters; Germany, 89,021 cubic meters; Africa, 82,613 cubic meters; Australia, 67,215 cubic meters; Sweden, 48,237 cubic meters; and Denmark, 35,582 cubic meters.

Exposition of Machinery at Breslau.—The Moniteur Officiel du Commerce, Paris, July 8, 1897, says:

At the thirty-fourth international exposition of machinery, which took place at Breslau last May, England and the United States were the only foreign countries which exhibited, and their exhibits were less important than at the exposition the preceding year. The German machines were in the large majority, and the local papers congratulated their compatriots on having "profited by the lessons of industry of other countries." In the German exhibits, all the usual agricultural machines could be seen, as well as movable steam engines, pumps, cattle-weighing apparatus, and new machines for gathering potatoes and destroying insects. There was a large display of lighting apparatus and carriages and parts thereof. Among the kitchen utensils was a new apparatus for cooking with gas, intended to do away with the use of butter and fats in the preparation of food.

Mexican Commerce in April and May, 1897.—The Estadística Fiscal, No. 151, City of Mexico, 1857, gives the following figures:

The value of the imports into Mexico during the month of April was $3,020,168,† as against $3,957,684 in 1896. The exports amounted to $10,202,622† in 1897, against $8,424,826 in the same month during the preceding year. The trade with the United States was:

Description.	1897.	1896.
Imports	$1,660,219	$2,158,109
Exports	8,918,920	6,423,026

The same publication, in its May edition (No. 152), says that the total value of the imports for that month was $2,830,790, against

* 1 cubic meter=35.316 cubic feet.

† Imports are given in United States currency; exports in Mexican currency. The Mexican dollar, April 1, 1897, equaled 50.8 cents.

$3,918,436 for May of 1896. The exports amounted to $9,061,572, against $8,650,307 for the same period of last year. The trade with the United States was as follows:

Description.	1897.	1896.
Imports	$1,437,322	$1,966,990
Exports	7,025,284	6,232,776

The following classification of imports for the month of May, 1897, was made:

Animals and animal products	$156,984
Vegetable products	438,136
Mineral products	662,732
Woven goods	543,399
Chemical and pharmaceutical products	155,916
Spirits	201,575
Paper and manufactures of	87,176
Machinery	366,649
Vehicles	47,241
Arms and explosives	96,787
Other articles	74,195
Total	2,830,790

Shoe Factory in Mexico.—According to the Revue du Commerce Extérieur, Paris, August 21, 1897, a syndicate has been formed with a capital of $2,000,000 (Mexican) to establish a large factory of shoes, boots, etc., in Mexico. The work of construction will be commenced at once, and the object of the syndicate is to send an immense quantity of shoes of cheap quality to the American and European markets and to take advantage of the fluctuations of exchange with foreign countries.

Portuguese Commerce in 1896.—The Moniteur Officiel du Commerce, Paris, June 17, 1897, says:

The total imports during 1896 amounted to 39,530 contos ($42,692,400),* which was a decrease of 331 contos ($357,480) as compared with the imports for 1895. The exports were 26,142 contos ($28,233,360), or 819 contos ($884,520) less than during the preceding year. The exports of gold greatly exceed the imports, which is due in part to the excess of imports over exports in the commercial world, and also to the necessity of paying the coupons of the national debt in gold. This occasions financial difficulties, but it is expected that the commercial treaties now in course of preparation will restore prosperity to the country.

Apart from its favorable situation in regard to commerce and navigation, Portu-

* 1 conto = 1,000 milreis.

gal is a rich and fertile country, and is inhabited by a sober and laborious people. Comparing the details of the commerce for the last two years, the chief differences are as follows: There was an increase of 461 contos ($497,880) in live animals, an increase of 29 contos ($31,320) in raw materials, a decrease of 11 contos ($11,880) in woven goods, a decrease of 185 contos ($199,800) in alimentary products, an increase of 69 contos ($74,520) in machines and instruments, an increase of 237 contos ($255,960) in manufactured articles, a decrease of 254 contos ($274,320) in alcohol, an increase of 23 contos ($24,840) in rice, a decrease of 57 contos ($61,560) in sugar and almost as much in butter, and an increase of 55 contos ($59,400) in coffee.

The increase in the import of raw materials and of industrial machinery, taken together with the diminution in the consumption of foreign tissues, seems to indidicate progress in national industry. It is to be noted that certain raw materials have been found in the country (such as oils for use in the soap trade and olive oil for preserving fish) which it was formerly necessary to import. The cotton industry is developing rapidly. The fabrication of écru tissues is at present sufficient for the local demand. The import of furniture, perfumery, buttons, coverings, and soap has almost entirely ceased, owing to the establishment of these industries in the country, and also on account of the high customs duty.

Agricultural Machinery in Smyrna.—The following is taken from the Moniteur Officiel du Commerce, Paris, July 15, 1897:

Great progress is apparent in the use of agricultural machinery in Smyrna, Asia Minor. Thirty years ago, machinery was unknown here. The earth was worked by means of plows drawn by cattle; the reaping and thrashing were accomplished in the most primitive way. It must be admitted that these impractical methods have not entirely disappeared, but this is due less to the lack of intelligence on the part of the farming population than to the want of capital; but the use of improved implements is steadily increasing. A new plow, drawn by horses and offering less resistance to the earth than the one formerly employed, is now in almost universal use. The most popular make comes from the United States and sells at 30 to 40 francs ($5.80 to $7.70) per plow. Mowers are also being introduced, but more slowly, on account of the cost, which is usually over 500 francs ($100). Some three hundred mowers are sold in Smyrna each year, almost all from America; England sends five or six machines and France three or four. Machines for sorting, sifting, and cleaning grains, as well as the scourers used in flour mills, come principally from England; France has but a small share of this trade. The agricultural production of Asia Minor is steadily growing, and the use of all labor-saving machinery and implements is bound to develop.

Commercial Conditions in Persia.—The Moniteur Officiel du Commerce, Paris, July 15, 1897, says:

Cotton goods are the most important article of commerce in Persia. They are imported chiefly from England. Russia, thanks to its vicinity, has succeeded in introducing considerable quantities of cotton goods into northern Persia. The Persian exhibitors at the annual fair of Nijni-Novgorod buy Russian products, and these frequent transactions keep Russia informed as to the needs of the Persian market. In southern Persia there is very little competition with English goods. In all financial and commercial operations in Persia, an intermediary, called a

"tellal," must be employed, which system naturally increases the cost of the article. Very long credits are always granted, and it is difficult for a European house to transact business in this country without a representative. The woolen goods used in Persia are usually of inferior quality and come from Austria and Germany; silk comes from France, Germany, and Italy. Before the appearance of the silkworm disease, raw silk was an important article of import. Most of the silk produced in Persia is consumed locally; the rest goes to Russia, and, in small quantities, to England. An establishment in Reshd raised 100,000 kilograms (220,460 pounds) of cocoons in 1894. Tea, which may be called the national drink, comes from China and India, and sells at 5 francs per kilogram (96 cents per 2.2046 pounds). The consumption of sugar is regular and large; it has been imported from France and Russia. There has been recently constructed at Kiserek, some 15 miles from Teheran, an establishment with Belgian capital, the production of which will doubtless materially decrease the import. There is also a Belgian glass factory. There is a good opening for knives in Persia. Every native wants one, and the articles so far offered are of very poor quality, and expensive as well. As a rule, cheap articles sell most readily. The importation of arms is prohibited, but the majority of the inhabitants are provided with them. There is much smuggling in this line; frequently parts of guns are hidden in bales of cotton. There are factories in some of the cities, but the articles are very inferior. In some parts of the country, the men have Martini rifles which have been brought across the Turkish frontier. Revolvers and pistols also command good prices. If a concession could be obtained from the Government, fortunes could be made in the import of firearms.

In the export trade, opium is one of the most important articles. Persian opium is not as highly valued as that from Turkey, owing to the fact that it is often adulterated. The opium sent to London is prepared in a different manner from that exported to China.

If the roads were better, wool would become a prominent item in the export trade. There are millions of sheep, and the wool is of good quality. Much of it goes to Russia; some to France or via Marseilles to the United States; a certain proportion is used locally in the manufacture of carpets, etc. Cotton grows readily, and during the war of secession, when there were no exports from America, the production of Persia reached gigantic proportions. It subsequently fell to its ordinary level. There are excellent fruits in Persia, and a large quantity is dried for export. The commerce in gum arabic and tragacanth is important. The chief centers for the fabrication of carpets are Suntanabad, Korassan, Chiraz, and Kurdistan. In the first-named place, one house employs more than 10,000 workmen. It is only on account of the cheapness of labor in Persia that the industry can still compete with the factories where machinery is employed. A workman receives less than 17 centimes (a little over 3 cents) a day. A carpet worth 200 francs ($36.80) is sometimes in the hands of three workmen for some six months. The raw materials cost very little, as cotton and wool can be obtained at a very low price in Persia.

Petroleum in Java.—The following is from the Moniteur Officiel du Commerce, Paris, July 1, 1897:

There are in the districts of Lidah and Koetei forty wells, with an average daily production of 19,800 gallons of oil, which could be easily increased to 25,000 gallons. Recent reports are to the effect that two new wells have been discovered, producing some 1,400 barrels per day additional. In the district of Panolan, there are fifteen wells, the largest of which has a daily production of 2,400 barrels. The wells of

Tinawen have been but little exploited. A company has obtained a ten-year concession for this district, and the probable yield is estimated at 1,600 cases a day. There are two refineries and another in process of construction. The paraffin factory at Ploentoeran, which has a capacity of production of 6,000 pounds a day, is only partially in action. A factory at Wonokrano supplies all the oils necessary for the sugar refineries and for the railroads of Java. Statistics for the last eight years show that the production of refined petroleum on the island has increased from 8,000 cases in 1889 to 1,250,000 cases in 1896. During the month of January, 1897, the production reached 108,007 cases, against 87,577 cases in January, 1896.

The same journal, in its edition of August 5, has another communication upon the same subject, to the effect that the exports of petroleum from Java have already begun to be a serious menace to the American trade. Java has such easy access to the important markets of the far East that the item of transportation is hardly worth considering. The imports of the Dutch Indies increased steadily from 1886 to 1893, the average being, for the first three years, some 19,800,000 gallons, and the total import in 1893 amounting to 35,200,000 gallons; but in 1894, it decreased to 24,000,000 gallons, and in 1895, it was 22,000,000 gallons. American companies, continues the article, are beginning to give the matter attention.

Salt Monopoly in Tonkin.—A correspondent writes to the Journal des Débats, Paris, September 17, 1897:

Besides the monopoly on alcohol, one has been recently established on salt. The Government has made a concession for ten years, and the annual payment will be 450,000 piasters* ($216,900). The contractors are to buy all the salt from the mines of Tonkin and Annam at a price based on the average for the past three years. One hundred and nine stores are to be established, one near each group of salt works. The chief contractor alone will have the right to sell the salt, either in the protectorate or for export. The price of sale will be fixed according to the average for the last three years, with an increase of half a piaster per picul (133⅓ pounds)—that is, 20 per cent for the contractor and 30 per cent for the protectorate. For the present, there will be no export duties.

* Probably the Mexican dollar, which at the time of this report was valued at 48.2 cents in United States currency.

55TH CONGRESS, 1st Session. } HOUSE OF REPRESENTATIVES. { DOC. NO. 91, Part 4.

Supplement to Consular Reports No. 206—November, 1897.

EXPORTS DECLARED

FOR THE

UNITED STATES.

RETURNS FROM CONSULAR DISTRICTS FOR QUARTER ENDED JUNE 30, 1897.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1897.

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QUARTER ENDED JUNE 30, 1897.

ALGERIA.

Algiers.

Argols	$2,227.77
Camels	204.58
Fish, salted	141.27
Goatskins, raw	49,513.28
Total	52,086.90

Oran.

Hair, vegetable	11,508.69
Skins, goat and kid	9,104.75
Total	20,613.44

ANTIGUA.

Sugar:	
Muscovado	287,149.57
Vacuum pan	15,991.28
Molasses	29,010.39
Hides	122.52
Tamarinds	99.64
Ginger	10.08
Total	333,083.48

ARGENTINE REPUBLIC.

Buenos Ayres.

Bird seed	658.19
Bones	18,223.96
Cedar logs	11,130.00
Hides (dry), ox and cow	622,530.69
Hair	7,997.92
Ostrich feathers	1,254.31
Paper stock	1,697.49
Quebracho:	
Extract	26,690.88
Wood in logs	6,764.14
Returned goods	6,013.72
Tripe, salted	13,279.66
Skins:	
Calf	19,886.75
Goat	84,808.21
Nutria	660.83
Various merchandise	275.68
Wool	1,532,922.09
Total	2,354,794.52

AUSTRALASIA.

NEW SOUTH WALES.

Newcastle.

Coal	$155,541.92
Shale	410.13
Total	155,952.05

Sydney.

Coal	32,805.00
Hides	10,798.92
Returned goods	8,884.08
Kangaroo and other skins	77,484.98
Sundries	4,738.50
Tin	40,719.90
Total	175,431.38

NEW ZEALAND.

Auckland.

Grass seed	891.17
Gum, kauri	1,730.50
Hides	119.66
Mutton casings	81.18
Onions	1,099.54
Pelts	1,283.63
Tree seeds	101.71
Total	5,307.39

Christ Church.

Gut, racquet	973.03
Sheep casings	18,018.00
Total	18,991.03

Dunedin.

Skins:	
Rabbit	2,582.00
Sheep	20,844.00
Cocksfoot grass seed	502.00
Total	23,928.00

Wellington.

Sheep casings	37,767.38
Glycerin	500.56
Pelts	396.13
Total	38,664.07

QUEENSLAND.

Brisbane.

Eucalyptus oil, pills, and extracts..	$160.22

SOUTH AUSTRALIA.

Adelaide.

Gum, yacca	30.04
Leather, chamois	172.76
Total	202.80
Total for March quarter (skins)	3,527.77

VICTORIA.

Melbourne.

Arsenic	817.09
Books	1,377.16
Oil, eucalyptus	262.26
Returned goods	958.89
Other	572.26
Total	3,987.66

AUSTRIA-HUNGARY.

Brunn.

Baskets	1,993.20
Cloth and woolen goods	21,328.60
Cotton goods	7,879.60
Furniture	14,084.10
Glassware	1,331.00
Gloves	30,789.77
Glue	444.82
Graphite	1,566.46
Leather goods	55,585.02
Linen goods	321.29
Smokers' articles	177.02
Umbrella fixtures	410.67
All other articles	612.23
Total	136,523.78

Budapest.

Books	775.10
Colors	126.28
Hair, cow	3,662.43
Flour	447.25
Glassware	2,875.70
Herbs and roots	968.76
Natural mineral water and salt	43,050.65
Oil of juniper berries	386.24
Paper flower leaves	30.45
Pepper, red	522.70
Rough wood	3,710.69
Shoemakers' paste	82.55
Silverware	157.95
Skins	2,811.55
Smoking utensils and tobacco	211.17
Wines and brandy	6,046.95
Wool	14,646.38
Total	80,512.80

Fiume.

Sugar	$420,948.89
Zinc dust	2,661.08
Goatskins	1,984.78
Total	425,594.75

Haida.

Artificial flowers	1,647.12
Buttons	21,654.51
Colors	1,283.65
Cotton ribbons	139.50
Cutlery	19,715.48
Glassware	125,472.47
Metal ware	2,742.36
Porcelain and pottery	66,961.83
Sparterie	4,705.78
Velveteen	2,411.33
Miscellaneous	57.29
Total	246,791.32

Innsbruck.

Glass, stained	1,749.46
Wooden ware	285.68
Wool	287.47
All other articles	114.13
Total	2,436.74

Reichenberg.

Beads	4,855.51
Buttons	5,137.84
Cloth and woolens	5,401.89
Cotton goods	380.79
Garnets and precious stones	311.00
Glassware	38,562.06
Imitation precious stones	32,161.46
Jewelry	26,049.00
Linen ware	228,704.61
Metal ware	1,232.09
Pictures	354.50
Porcelain ware	1,982.13
Sparterie	267.33
Toys	346.30
Sundries	13.20
Total	345,759.71

Trieste.

Coffee	3,864.61
Cuttle bone	1,483.05
Drugs and chemicals	270.37
Fruit, dried	225.74
Gum	12,909.09
Herbs, roots, etc	7,019.69
Insect flowers and powder	23,612.34
Macaroni	268.93
Oils, etc	1,186.75
Pepper	4,519.94
Polishing earth	1,928.10
Seeds	1,587.53
Skins, hides, etc	22,756.76
Sponge	4,866.18
Tartar, raw	6,699.39
Tobacco, leaf	553.62

Turpentine	$239.46
Wines and liquors	971.23
Wood, dyeing	287.65
Zinc dust	812.59
Total	96,063.02

Vienna.

Albumen	4,598.39
Amber	3,010.62
Argols	9,918.13
Art, works of	6,082.76
Artificial flowers	716.57
Baskets	7,390.26
Books	2,347.48
Brushes	243.84
Buttons	67,088.34
Caps	366.77
Carbons	12,389.85
Cloth and woolen goods	40,571.07
Cotton goods	5,786.18
Dresses	685.31
Drugs and chemicals	1,424.17
Fans	14,211.69
Felt	276.38
Fur	472.32
Glassware	33,833.23
Gloves	166.50
Hair, animal	1,351.45
Leather goods	9,395.34
Linen goods	10,764.83
Magnesite	30,264.47
Meerschaum, crude	7,417.77
Metal ware	28,320.83
Musical instruments	1,470.27
Ozocerite and ceresin	12,323.25
Paper goods	2,619.66
Porcelain and pottery	5,568.66
Scientific instruments	2,106.33
Shell and bone ware	2,846.62
Silk goods	48,352.75
Smokers' articles	15,027.52
Sparterie	261.05
Stationery	537.20
Tobacco	905.42
Toys	7,963.53
Umbrella fixtures	29,972.32
Wax	633.76
Wine	2,698.57
Wooden ware	4,926.62
Wool	14,488.11
Miscellaneous	1,448.72
Total	453,244.91

AZORES.

Fayal.

Empty sacks (returned)	321.60

BAHAMAS.

Albert Town.

Pineapples	4,002.35
Logwood	2,452.50
Salt	1,018.50
Total	7,473.35

Dunmore Town.

Salt	$145.00
Pineapples	1,873.00
Fruit	259.00
Total	2,277.00

Governor's Harbor.

Bulbs	2.00
Copper	22.04
Combs	5.00
Eggplant	1.00
Metal	17.10
Pineapples	80,380.15
Shells	12.00
Total	80,439.29

Green Turtle Cay.

Pineapples	1,257.19
Lily plants	13.86
Conch shells	35.28
Coral	11.76
Mixed shells	3.36
Starfish	1.36
Sea fans	.48
Sapodillas	.60
Total	1,323.89

Mathewtown.

Coffee	11,574.50

Nassau.

Bark	880.50
Fruit, canned	16,518.60
Shells	655.50
Sisal hemp	7,286.97
Sponge	71,105.00
Sundries	2,596.14
Tobacco	1,732.11
Total	100,774.82

BARBADOS.

Hides	519.64
Asphalt	7,248.94
Molasses	10,360.97
Sugar	1,528,968.11
Total	1,547,097.66

BELGIUM.

Antwerp.

Acid	3,207.12
Animals	299.45
Hair, animal	13,111.58
Aniline salts	7,985.30
Books	5,910.42
Bricks	1,415.21
Canvas	1,251.29
Cement	92,591.90
Chicory	48,874.37
Chloride of lime	19,151.14
Coffee	5,260.90
Coke	1,945.71

Cotton goods	$1,213.83
Diamonds	63,183.07
Fiber	1,347.40
Furniture	1,186.88
Gin	118.09
Hides	49,671.66
India rubber	178,009.06
Ivory	43,788.97
Linoleum	6,389.15
Matches	5,375.58
Meat extract	249,080.05
Oil	4,348.68
Paintings	386.00
Paper	30,180.48
Pease and canned vegetables	10,047.61
Phosphate	2,848.92
Paraffin	745.82
Pitch	965.41
Potash	14,473.64
Rags	27,171.22
Sand	306.98
Soda	5,877.70
Sugar, beet	1,405,020.16
Sulphur	3,619.93
Wool	761,874.55
Grease	3,679.04
Sundries	2,096.00
Total	3,074,010.27

Brussels.

Aniline colors	309.82
Arms (guns)	532.78
Bagging	616.83
Carpets	118.38
Cement	165,717.96
Church regalia	150.64
Corsets	64,285.20
Earthenware	940.93
Fur, refuse	1,002.87
Glass:	
Plate	39,258.59
Window	14,351.57
Ware	150.59
Gloves	117,362.39
Glue and glue stock	1,331.59
Hats	100.36
Hatters' fur	25,140.63
Horn strips	113.87
Household goods and personal effects	177.75
Instruments, musical	605.98
Lace goods	43,919.02
Leather	1,672.85
Linen goods	167,811.26
Machinery	1,523.44
Marble	719.09
Paintings, oil	584.11
Paper and books	5,592.31
Phosphates	9,307.76
Plants	652.34
Rags and paper stock	5,562.64
Rattan	697.31
Scales and weights	1,201.86
Skins (rabbit, sheep, and other)	43,404.75
Tiles	892.62
Vegetables, preserved	$3,227.15
Veils, cotton	1,617.02
Wine	3,503.35
Woolen goods	8,243.16
Sundries	32,625.98
Total	765,026.75

Charleroi.

Cement	16,657.83
Earthenware	480.28
Glass:	
Plate	25,047.38
Window	336,153.22
Other	1,085.24
Marble	5,917.78
Sundries	1,310.98
Wool, washed	21,134.88
Total	407,787.59

Ghent.

Albumen	973.49
Baskets	497.80
Cement	7,570.46
Cordage	251.61
Chicory:	
Root	72,207.27
Granulated	1,197.12
Cotton goods	1,681.31
Flax	75,466.25
Glass, art stained	183.35
Hatters' furs	19,985.02
Household effects	784.74
Lace	5,466.67
Laces (silk), shoe	1,520.80
Linen goods	22,583.42
Matches	6,531.51
Paper stock	70,262.06
Plants	30,519.44
Rabbit skins	1,055.46
Tapestry	482.53
Tow	64,507.01
Thread	3,140.67
Wool and wool waste	8,691.95
Woolen goods	1,342.06
Yarns, tow	3,839.57
Total	410,741.57

Liege.

Firearms	246,699.80
Glassware	37,494.80
Lamp fixtures	2,258.20
Machinery	1,958.80
Paper, writing	1,362.00
Straw goods (braids)	10,659.00
Sugar, beet root	13,433.60
Superphosphate	8,336.00
Zinc and zinc dust	28,710.40
Total	350,912.60

Verviers.

Card clothing	420.09
Fancy goods	117.12
Flocks	1,294.80
Hones	1,994.84

Machinery	$512.66
Paper tubes	672.59
Religious articles	173.46
Sheepskins, salted	29,063.10
Wool	543,298.29
Woolen:	
Goods	175,234.32
Rags	15,615.26
Yarns	7,195.52
Total	775,692.05

BERMUDA.

Barrels, empty oil	173.24
Brandy	4,598.84
Furniture	29.19
Hides	1,128.04
Lily buds	4,099.19
Lily bulbs	1,822.00
Milk punch	116.79
Onions	394,765.39
Palm leaves	59.19
Potatoes	58,770.26
Rum	661.83
Vegetables	1,744.59
Whisky	8,380.11
Total	476,348.66

BRAZIL.

Bahia.

Coffee	301,158.80
Cocoa	1,323.15
Carbons	121.84
Diamonds	1,528.02
Feathers	435.32
Hides	8,169.52
Hair	25.66
Rubber	7,209.87
Rosewood	697.91
Skins	53,299.32
Total	373,969.41

Ceara.

Feathers	417.45
Hides	16,200.00
Skins	568,248.60
Wax	22,715.87
Total	607,581.92

Maceio.

(No exports declared.)

Pernambuco.

Feathers, ostrich	303.26
Hides, dry salted	36,279.90
Rubber	1,827.36
Skins	342,725.50
Wood, Brazil	350.73
Total	381,486.75

Rio de Janeiro.

Coffee	$5,224,377.57
Manganese ore	41,214.15
Total	5,265,591.72

Rio Grande do Sul.

Glue stock	3,343.94
Hair	17,616.79
Hides	39,952.78
Horn piths	69.59
Sounds	330.79
Wool	968.02
Total	62,281.91

Santos.

Coffee	3,337,960.30

Victoria.

Coffee	548,691.78
Total for March quarter (coffee)	729,238.00

BRITISH GUIANA.

Demerara.

Sugar	453,151.81

BRITISH HONDURAS

Belize.

Alligator pears	4.80
Bananas	22,858.25
Chicle (chewing gum)	22,150.74
Castings or patterns (charges only)	9.00
Cocoanuts	2,028.27
Cedar	126.50
Hides	625.76
India rubber	1,118.57
Mangoes	98.50
Marine apples	.50
Mahogany	91.67
Plantains	3,713.15
Pineapples	237.50
Quartz for assay (charges only)	4.50
Sarsaparilla	56.92
Sheep wool	31.98
Water for analysis (charges only)	2.50
Returned goods:	
Boots	22.50
Boiler (charges only)	.50
Hemp rope	657.50
Iron safe	162.50
Personal effects	100.50
Total	54,102.61

BRITISH INDIA.

Bombay.

Sandalwood	1,329.56
Fish maws	1,407.36
Goatskins	15,864.59
Ganja	172.27
Carpets	11,580.18
Jewelry	654.78

Woodwork	$1,079.56
Brass ware	941.86
Ironware	52.11
Chutnies	300.08
Indian curios	4,217.57
Total	37,599.92

Calcutta.

Carpets	2,939.87
Drugs	219,412.35
Fishing rods	396.67
Gunny:	
Bags	531,484.42
Cloth	955,838.70
Hides	300,976.87
Jute	128,453.62
Butts and rejections	220,849.87
Mica	12,462.75
Paper stock	4,455.22
Rubber	41,894.77
Saltpeter	93,152.02
Skins	481,259.70
Tea	873.00
Miscellaneous	3,518.10
Total	2,997,967.93

Karachi.

Woolen carpets	1,744.35
Total for March quarter (woolen carpets)	486.90

Madras.

Skins, tanned:	
Goat	325,271.50
Sheep	21,650.90
Indigo	10,198.71
Manganese ore	5,338.30
Mica	1,883.70
Carpets	162.80
Total	364,505.91

CANARY ISLANDS.

Teneriffe.

Cochineal	5,756.31
Wine	242.00
Total	5,998.31

CEYLON.

Colombo.

Cacao	715.00
Cinchona bark	5,258.00
Cinnamon	10,709.00
Leaf oil	714.00
Citronella oil	10,021.00
Cocoanuts:	
Desiccated	15,873.00
Oil	80,506.00
Coir fiber	58.00
Hides (salted, arsenic cured)	1,151.00
Plumbago	41,775.00
Tea	34,746.00
Total	201,526.00

Point de Galle.

Citronella oil	$9,992.00
Coir yarn	328.00
Total	10,320.00

CHILE.

Antofagasta.

Nitrate of soda	52,867.33
Antimony and tin	2,189.92
Bar silver	1,807.29
United States gold coin	1,285.00
Silver ores	47,617.49
Total	105,767.03

Arica.

(No exports declared.)

Talcahuano.

Wool	24,740.96

Valparaiso.

Iodine	6,214.21
Silver ores	443.31
Wool	35,212.76
Miscellaneous	47.09
Total	41,917.37

CHINA.

Amoy.

Oolong tea:	
Formosa	736,612.97
Amoy	328.11
Total	737,041.08

Canton.

Cassia	28,376.43
China ware	1,470.24
Fans, palm leaf	185.53
Firecrackers	60,696.09
Matting	278,210.47
Paper	159.00
Preserves	2,427.33
Rattans and ware	17,596.59
Silk:	
Raw	473,580.32
Piece goods	54,348.06
Tea	1,447.19
Wooden ware	1,179.09
Sundries (including bristles, cantharides, gallnuts, grass cloth, ivory, skins, etc.)	19,953.25
Total	939,629.59

Chefoo.

Pongees	984.83
Silk	25,992.42
Straw braid	38,975.79
Total	65,953.04

Fuchau.

Tea, Congou	31,967.33

Tientsin.

Bristles	$32,668.98
Duck's down	268.41
Feathers, heron	1,247.65
Hair, horse	786.39
Intestines, sheep	6,532.73
Miscellaneous	1,455.58
Skins:	
Goat	34,220.47
Sheep rugs	3,869.05
Sable	2,301.13
Tiger	91.75
Straw braid	39,486.73
Wool, sheep	354,931.55
Total	477,860.42

COLOMBIA.

Barranquilla.

Balsam:	
Copaiba	640.00
Tolu	1,208.00
Cedar logs	600.00
Coffee	600,974.28
Feathers, garza	260.00
Goatskins	2,188.80
Gold dust	480.00
Hides, dry salted or arsenic cured	118,651.86
Hair, horse	144.00
Indigo	48.00
Plants (orchids)	1,200.00
Rubber	760.00
Photographic apparatus (returned)	50.00
Total	727,204.94

Bocas del Toro.

Bananas	290,545.50
Cocoanuts	731.00
Total	291,276.50

Cartagena.

Cocoanuts	307.69
Coffee	170,671.29
Copaiba	1,853.85
Feathers	288.47
Fustic	94.04
Hides	22,383.92
Ivory nuts	1,231.41
Minerals	200.00
Miscellaneous	9.62
Returned goods	657.69
Rubber	12,307.09
Skins	1,055.06
Total	211,060.13

Colon.

Cocoanuts	1,072.24
Mahogany	1,691.49
Bananas	16,886.73
Ivory nuts	3,503.85
Rubber	466.35
Manganese ore	14,092.00
Cedar	$1,396.20
Turtle shell	3,758.54
Elephant	681.73
Total	43,549.13

Panama.

Returned goods	738.50
Coffee	1,257.89
Copaiba balsam	688.01
Hides	15,842.03
India rubber	12,820.83
Ivory nuts	2,527.18
Opium	1,127.18
Miscellaneous	342.54
Sarsaparilla	362.67
Shells:	
Mother-of-pearl	11,839.68
Tortoise	482.33
Silver coin	4,740.13
Skins, deer	1,488.13
Woods:	
Cedar	1,033.50
Cocobola	2,363.38
Total	57,153.98

Rio Hacha.

Hides	5,165.00
Skins	35,868.50
Total	41,033.50

Santa Marta.

Bananas	50,349.98

DANISH WEST INDIES.

Christiansted.

Rum	1,281.30
Sugar	28,233.79
Tamarinds	509.05
Total	30,024.14

Fredericksted.

Sugar	214,092.77
Rum	3,331.75
Bay rum	970.79
Molasses	870.60
Total	219,265.91

St. Thomas.

Bay rum	4,421.33
Sugar, crystallized	1,209.13
Goatskins	194.78
Rum	355.71
Turtle shell	590.00
Total	6,770.95

DENMARK.

Copenhagen.

Bagging	650.07
Bags, empty (returned)	2,113.87
Bicycle parts (returned)	403.25

Books	$1,819.95
Cement	11,632.06
Cherry cordial	301.50
Flintstones	397.58
Hair, human	1,155.48
Hides	3,211.30
Machinery	89.98
Porcelain	2,111.10
Rags	6,045.06
Rennets	21,394.82
Rubber shoes (returned)	240.00
Skins	7,262.13
Terra cotta	167.17
Wool	7,938.79
Miscellaneous	1,022.57
Total	67,956.68

DOMINICAN REPUBLIC.

Azua.

Bird feathers	187.50
Coffee	383.76
Gum guaiac	47.68
Honey	81.87
Hides	1,747.36
Lignum-vitæ	1,413.25
Sugar	148,118.76
Skins	708.73
Turtle shells	36.50
Wax	1,019.37
Wagon wheels (for repair)	82.50
Total	153,827.28

Macoris.

Sugar	673,175.03
Lignum-vitæ	4,495.16
Honey	1,510.57
Wax	994.80
Cocoa	161.54
Total	680,337.10

Monte Christi.

Beeswax	248.50
Goatskins	832.80
Hides	237.12
Honey	595.00
Logwood	1,839.77
Mahogany	252.00
Satinwood	2,000.00
Total	5,152.10
Total for March quarter	5,918.57

Puerto Plata.

Goatskins	9,946.65
Logwood	8,093.75
Sugar	1,481.53
Sundries	135.50
Tobacco	4,590.99
Total	24,248.42
Total for March quarter	13,146.07

Santo Domingo.

Cedar	$100.00
Ammonia tanks, empty	318.00
Hides	4,346.79
Honey	5,576.10
India rubber	20.00
Logwood	1,209.07
Machinery	999.00
Sugar	163,249.97
Total	176,109.83

DOMINION OF CANADA.

BRITISH COLUMBIA.

Nanaimo.

Coal	416,793.00
Hides	435.00
Household goods	560.00
Returned goods	60.00
Total	417,848.00

Union.

Coal	131,378.50
Coke	3,460.00
Total	134,838.50

Vancouver.

Fish	13,441.00
Hides	15,425.00
Logs	4,290.00
Lumber	1,928.00
Matte	32,011.00
Merchandise	3,204.00
Returned	5,779.00
Ore:	
Galena	189,862.00
Gold	4,002.00
Iron	1,174.00
Shingles	1,423.00
Total	272,539.00

Victoria.

Coal tar	152.50
Copper ore	1,245.60
Drugs	1,006.27
Furs, hides, and skins	32,893.82
Gold bullion	61,816.48
Goods in transit	2,452.78
Junk	801.39
Liquors	4,391.99
Returned goods	997.43
Tea	267.53
Tin plates	17,136.10
Wool	4,088.41
Miscellaneous merchandise	806.06
Total	128,056.36

MANITOBA.

Deloraine.

Emigrants' effects	$300.00
Horned cattle	20,871.00
Total	21,871.00

Emerson.

Cattle	9,398.50
Iron pipe (culvert)	473.69
Total	9,872.19

Gretna.

Cattle	3,814.00
Emigrants' effects	300.00
Horses	310.00
Total	4,424.00

Lethbridge.

Beef hides, dried	210.00
Coal, bituminous	15,739.85
Calfskins	4.90
Personal effects	200.00
Sheepskins	37.80
Total	16,192.55

North Portal (Assiniboia).

Natural-history specimens	190.00
Furs, raw	9,330.74
Wool	5,863.33
Total	15,384.07

Winnipeg.

Returned goods	3,531.50
Bran, etc	3,112.00
Cattle	11,669.00
Emigrants' effects and teams	450.00
Fish (fresh), packed in ice	13,369.00
Furs, raw	19,280.00
Hides, raw	27,465.00
Sundries	1,297.50
Wool	23,503.50
Total	103,677.50

NEW BRUNSWICK.

Bathurst.

Fish (canned lobsters)	2,610.00
Household effects	25.00
Potatoes	86.00
Shingles	10,601.85
Total	13,322.85

Campbellton.

Lobsters, canned	6,912.50
Cedar:	
Shingles	81,113.75
Railway ties	490.00
Clapboards, spruce	600.00
Total	89,116.25

Campobello.

Lobsters:	
Canned	$964.00
Live	96.00
Lumber	400.00
Tin	127.50
Total	1,587.50

Fredericton.

Agricultural products:	
Potatoes	628.50
Turnips	51.00
Bark, hemlock	562.50
Cotton waste	629.27
Emigrants' effects	900.00
Glue stock	108.58
Horses	502.50
Machinery	28.00
Wood, manufactures of	44.00
Spruce gum	213.45
Sundries	51.00
Laths and lumber	67,742.56
Total	71,461.36

Grand Manan.

Fish:	
Dried	379.25
Smoked	17,431.75
Lobsters:	
Canned	6,303.60
Live	3,670.00
Total	27,784.60

Moncton.

Clay (terra alba)	2,832.90
Emigrants' effects	875.00
Returned goods	46.42
Plaster.	
Calcined	3,826.20
Land rock	3,994.70
Rock	16,945.85
White rock	1,062.50
Maple sugar	1.00
Wood:	
Lumber and laths	7,367.25
Piles and poles	430.00
Railroad ties	1,536.00
Total	38,917.82

Newcastle.

Returned goods	20.00
Fruit (canned blueberries)	6,420.05
Lobsters, canned	14,809.76
Personal effects	93.00
Soldering machine	40.00
Wood:	
Box shooks	788.50
Laths and shingles	6,475.78
Ships' knees	248.95
Pulp, sulphite fiber	9,891.45
Total	38,878.49

Richibucto.

Mackerel, fresh	$169.60

St. Andrews.

Fertilizer	928.00
Pollock, dry	322.78
Potatoes	124.50
Total	1,375.28

St. George.

Granite	787.50
Lumber:	
Long	5,690.00
Laths	1,283.65
Wood, kiln	699.50
Total	8,460.65

St. John.

Potatoes	850.00
Horses	727.50
Bark, hemlock	152.50
Coal:	
Bituminous	20,442.50
Tar	217.50
Emigrants' effects	6,890.00
Fish:	
Fresh	798.50
Oil	259.38
Oranges	450.80
Returned goods	886.50
Hides and skins	5,567.10
Dredging machines	3,502.50
Minerals:	
Cement	434.50
Lime	185.50
Mineral water	492.50
Molasses	548.10
Salt	3,399.80
Gin	295.70
Tea	149.70
Cigarettes	1,431.21
Wood:	
Laths and lumber	432,343.12
Kiln	4,719.50
Wool	3,755.94
Total	488,500.35

St. Stephen.

Coal tar	163.00
Cocoa butter	1,138.00
Emigrant's team	40.00
Fish	2.00
Returned goods	1,075.00
Horse	75.00
Iron, manufactures of	50.00
Molasses	1,159.00
Skins	488.00
Tea	3,470.00
Turnips	27.00
Wood:	
Hoops	$258.00
Laths	6,198.00
Lumber	28,923.00
Pickets	160.00
Posts	62.00
Shingles	4,760.00
Ship timber	90.00
Wool	15,125.00
Total	63,263.00

Woodstock.

Bark	10,200.00
Emigrants' effects	130.00
Horses	50.00
Lumber	4,998.00
Lambs and sheep	186.00
Potatoes	539.75
Returned goods	275.00
Railroad ties	320.00
Shingles	3,097.35
Wool	790.60
Total	20,586.70

NEWFOUNDLAND.*

St. John's.

Fish	33,196.90
Miscellaneous	1,148.71
Oil	4,863.83
Ore	33,170.64
Total	72,380.08

NOVA SCOTIA.

Annapolis.

Cord wood	2,115.75
Lumber	31,643.24
Laths	69.30
Piling	3,105.00
Total	36,933.29

Barrington.

Cord wood	227.50
Herrings, salted	238.50
Lumber	851.99
Lobsters, live	6,934.50
Mackerel:	
Fresh	2,012.00
Salt	285.00
Total	10,547.49

Bridgewater.

Lumber	1,800.36
Laths	2,378.75
Pulp	926.33
Railway ties	400.00
Total	5,505.44

*Newfoundland, although not in the Dominion of Canada, is inserted here for convenience of record.

Cape Canso.

Mackerel:	
Iced	$3,474.05
Salt	30.00
Lobsters:	
Canned	1,182.00
Live	144.00
Halibut:	
Iced	178.00
Salt	14.80
Total	5,022.85

Cornwallis.

Carpets	135.00
Lumber	2,727.50
Laths	270.00
Wool	634.58
Wood	140.00
Total	3,907.08

Digby.

Eggs	60.00
Household effects	153.00
Lumber	38,756.00
Laths	249.00
Lobsters, live	2,547.00
Pickets	5.00
Potatoes	1.00
Poles	136.00
Piling	7,033.00
Spars	97.00
Turnips	5.00
Wood, fire	5,887.00
Total	54,929.00

Halifax.

Berries	1,441.50
Emigrants' effects	1,179.00
Coke	1,139.00
Fish:	
Canned	82,668.99
Dry	26,035.73
Fresh	4,797.10
Oil	1,228.62
Pickled	2,994.37
Returned goods	1,102.04
Hides and skins	3,734.89
Horses	182.50
Jewelers' sweepings	202.50
Junk	1,966.49
Laths and lumber	13,026.68
Liquors	1,530.66
Molasses	296.98
Potatoes	268.50
Skates	911.68
Tea	2,903.87
Wagon	184.00
Total	147,795.10

Kempt.

Gypsum	7,174.15
Manganese	425.00
Piling	$6,803.20
Lumber	5,452.00
Wood:	
Fire	350.00
Slab	85.00
Laths	40.00
Gum, spruce	8.00
Total	20,337.35

Liverpool.

Fish:	
Lobsters—	
Canned	5,990.00
Live	5,140.00
Mackerel, salted	455.00
Lumber	8,777.36
Wood pulp	1,417.00
Total	21,779.36

Lunenburg.

Lumber and laths	5,274.26
Cord and slab wood	155.95
Total	5,430.21

Parrsboro.

Coal	3,660.00
Wood and manufactures:	
Laths	5,005.00
Board	6,559.00
Piling	9,709.00
Poles	137.00
Scantling	1,080.00
Wood	228.00
Total	26,378.00

Pictou.

Lobsters, canned	53,798.02
Emigrants' effects	667.50
Salmon, fresh	463.50
Wool	9,232.35
Woolen cloth	534.34
Yarn waste	506.06
Calfskins, salted	152.50
Hardwood lumber	402.50
Hair, plastering	192.74
Total	65,949.51

Port Hawksbury and Mulgrave.

Emigrants' effects	60.00
Knees	2,321.00
Lobsters:	
Canned	3,267.30
Iced	278.00
Mackerel:	
Salt	149.00
Fresh	6,192.43
Railroad ties	6,493.80
Total	18,761.53

Port Joggins.

Wood and manufactures:	
Laths	$1,757.00
Lumber	7,357.00
Round, unmanufactured spruce piling and poles	11,796.00
Settlers' effects	125.00
Total	21,035.00

Shelburne.

Cord wood	468.75
Lobsters:	
Live	13,277.50
Canned	2,908.00
Lumber	2,266.05
Mackerel, pickled	502.50
Total	23,422.80

Sydney.

Coal	40,554.50
Lump gypsum	904.50
Machinery	102.50
Total	41,561.50

Windsor.

Horse	152.00
Gypsum, unground	29,610.00
Hides and skins	248.00
Emigrants' effects	125.00
Lumber, sawn	7,429.00
Total	37,564.00

Yarmouth.

Bay rum	248.50
Cotton waste	524.72
Fish:	
Fresh—	
Halibut	7,880.02
Lobsters	438.50
Mackerel	3,625.95
Pickled, dried, etc.—	
Cod	3,867.40
Hake	752.50
Lobsters, canned	18,423.00
Hides	227.50
Lumber:	
Boards	2,808.10
General	5,863.15
Laths	319.00
Piling	682.50
Planks	1,480.66
Poles	274.85
Potatoes	139.35
Total	47,555.70

ONTARIO.

Amherstburg.

Cattle	953.90
Hay	270.00
Horses	800.00
Logs	1,068.00
Lumber	$1,750.79
Staves	24,211.60
Wool	2,686.36
Total	31,740.65

Arnprior.

Cattle	10,597.00
Cloth	271.22
Emigrants' effects	1,805.00
Hides and skins	1,357.00
Horses	860.00
Laths	1,664.41
Lumber	253,798.00
Pulp wood	228.00
Shingles	2,300.58
Tea	11,057.30
Timber	220.20
Wool	1,758.00
Wool waste	170.88
Total	290,568.21

Barrie.

Barley	1,017.28
Bones	116.70
Cattle	12,991.00
Hair, plastering	138.00
Lumber (elm and pine)	442.15
Settlers' effects	400.00
Wool	7,508.55
Total	22,613.68

Belleville.

Actinolite rock, ground	272.00
Bones	366.63
Cattle (stockers)	6,377.21
Emigrants' effects	448.25
Hides and skins	10,538.75
Horses	1,880.00
Returned goods	344.20
Wool	2,741.00
Total	22,968.04

Chatham.

Animals for breeding purposes	150.00
Beans	3,344.81
Cattle	19,750.00
Emigrants' effects	1,660.00
Hides and skins	500.00
Logs and timber	18,703.50
Lumber	680.00
Shooks, staves, headings, and bolts	35,932.80
Wool	11,821.91
All other articles	771.28
Total	93,314.30

Clifton.

Cattle	978.00
Drugs	149.50
Furs	127.50
Hides and skins	333.75
Horses	125.00
Returned	22,310.00

Meal, linseed	$214.00
Nursery stock	883.33
Pulp (moist ground spruce)	1,320.00
Returned goods	4,000.00
German silver, scrap	781.25
Tobacco	235.00
Tallow	80.27
Wool	360.80
Canadian postage stamps	150.00
Other articles	275.00
Total	32,323.40

Clinton.

Barley	897.40
Cattle	2,763.00
Flax	68,294.42
Horses	1,515.00
Paper stock	462.45
Sheep for breeding	984.00
Total	74,916.27

Collingwood.

Cattle	20,477.21
Emigrants' effects	910.00
Fish, fresh	35,227.42
Horses	430.00
Logs	95,160.00
Lumber	34,260.31
Returned goods	122.74
Shingles	443.05
Tankage (fertilizer)	1,026.10
Wool	7,606.47
Miscellaneous	3,048.60
Total	198,681.90

Cornwall.

Returned goods	40.00
Clothing, second hand	8.00
Posts, cedar	228.06
Hides	7,560.12
Lumber	1,257.17
Maple sugar	7.50
Personal effects	1,314.50
Shingles	465.00
Woolen goods	410.34
Woolen patterns	60.00
Total	11,350.69
Total for March quarter	7,578.16

Courtright.

Logs and timber	4,774.00
Lumber	407.00
Shooks, staves, headings, and bolts	3,243.58
Total	8,424.58

Deseronto.

Lumber	107,838.53
Shingles	24,468.34
Laths	6,912.52
Headings	413.10
Ties	8,271.40
Telegraph poles	422.10
Pickets	76.75
Posts	$2,550.50
Sawdust	7.00
Brick	64.00
Cement, portland	20.00
Charcoal	3,685.65
Total	154,729.89

Fort Erie.

Beans	321.60
Berries	105.00
Cattle	15,591.00
Fish, fresh	447.00
Grass seed	702.56
Hides	387.75
Horses	8,843.02
Lumber	3,453.00
Personal effects	6,995.00
Returned goods	5,784.97
Tobacco, leaf	1,050.00
Timber	3,177.00
Wood	180.00
Wool	5,390.72
Total	52,428.62

Fort William.

Fish, fresh	951.40
Pulp wood	4,210.00
Total	5,161.40

Galt.

Buttons, vegetable ivory	3,463.00
Bones	598.00
Bran	293.00
Cows for breeding purposes	225.00
Cattle	1,720.00
Emigrants' effects	7,710.00
Horses	182.00
Hides, green salted	4,813.00
Lumber	599.00
Machinery	470.00
Nuts, vegetable ivory	2,547.00
Paper stock	2,043.00
Returned goods	193.00
Saws, crosscut	1,128.00
Tobacco, Habana	817.00
Whisky	2,209.00
Wool	3,238.00
Total	29,248.00

Gananoque.

Charcoal	265.66
Cattle	482.00
Emigrants' effects	670.00
Total	1,417.66

Goderich.

Cattle	1,332.00
Fish, fresh	3,193.20
Lumber	290.90
Salt	410.75
Total	5,226.85

Guelph.

Animals for breeding purposes	$580.00
Bones	288.00
Bran	368.00
Emigrants' effects	5,651.00
Flax straw	12,338.65
Grease, soap	780.40
Hides	3,982.25
Horses	350.00
Lumber	254.57
Paper stock	593.00
Tea	145.00
Wool	3,008.00
Total	28,438.87

Hamilton.

Aniline dye	1,431.40
Apples	840.00
Bones	1,380.00
Cattle	1,053.00
Coal tar	155.50
Coffee	3,707.14
Currants	460.87
Fertilizer	897.22
Gaslight liquor	513.35
Gooseberries	200.10
Hides and skins	24,401.57
Lumber	28,075.06
Rags	2,809.70
Returned goods	5,225.88
Shingles	2,196.78
Tea	118,173.19
Whisky	204.40
Wool	157,286.17
Miscellaneous	1,141.00
Total	350,152.33

Hereford.

Horses	370.00
Household goods and personal effects	598.00
Spruce logs	62,310.00
Total	63,278.00

Kingston.

Bones	318.00
Cattle	1,385.00
Emigrants' effects	40.00
Furs, raw	15,107.50
Fish, fresh	1,049.18
Hides	9,649.30
Hair	400.00
Junk	476.00
Lumber	34,260.37
Pulp wood	9,300.00
Returned goods	3,185.00
Tea	3,751.58
Veal	257.82
Wool	13,010.52
Total	92,190.27

Lindsay.

Barley	$8,116.30
Cattle	17,546.00
Emigrants' effects	890.00
Horses	835.00
Laths and shingles	12,253.42
Lumber	8,097.43
Pease	6,278.84
Wool	8,275.00
Miscellaneous	936.30
Total	63,228.29

London.

Apples	127.60
Animals for breeding purposes	580.00
Bones	696.00
Bran	460.00
Books	416.95
Cattle	3,450.00
Flax	27,722.12
Fertilizers	575.72
Hides	38,019.91
Jewelers' sweepings	250.00
Horses	5,944.00
Lumber	4,019.56
Paper stock	174.20
Phenastine	210.88
Rags	640.54
Returned goods	513.61
Stamps	767.01
Salt cake	355.60
Staves	3,758.50
Scrap silver	250.00
Tobacco	7,407.72
Tea	16,700.51
Wool	19,556.73
Total	132,506.56

Morrisburgh.

Horses	175.00
Lumber	1,502.04
Total	1,677.04

Napanee.

Bones	264.00
Emigrants' effects	685.00
Hides and skins	1,358.00
Lumber	128.70
Total	2,435.70

Ottawa.

Asbestos	210.00
Binding case tins and plates	252.00
Bicycles	289.00
Bones	701.89
Curtain sticks	10,466.28
Fertilizer, tankage	632.38
Hides and skins	19,045.00
Horses	3,080.00
Laths	22,696.83

Lumber	$1,080,271.79
In bond for export	105,105.68
Mica	28,908.79
Match blocks	27,880.83
Meteorites	200.00
Rubber shoes, old	725.40
Ore, galena	1,800.00
Pickets	3,823.13
Posts	717.63
Platinum, scrap	190.61
Poles	522.02
Sulphite pulp	12,690.92
Shingles	12,341.23
Stamps, jubilee postage	338.25
Tallow	646.10
Tea	8,312.26
Ties, railroad	4,738.80
Wool	12,416.34
Total	1,359,003.16

Owen Sound.

Bones	186.00
Books	10.28
Cattle	23,346.50
Emigrants' effects	401.00
Fish, fresh	437.17
Hides	7,950.00
Horses	60.00
Lumber	1,177.64
Skewers	750.22
Wool	24,575.00
Total	58,893.81

Palmerston.

Returned goods	150.00
Calves	2,144.75
Cattle	31,649.00
Emigrants' effects	2,311.00
Flax	37,429.10
Hides	752.89
Horses	682.50
Lumber	369.00
Sheep	94.00
Tow	162.00
Wool	16,629.53
Total	92,373.77

Parry Sound.

Cattle for breeding	1,596.00
Emigrants' effects	197.50
Pine:	
Laths	1,237.62
Logs	68,600.00
Shingles	12,189.49
Staves and heads	109.00
Lumber, rough white pine	187,738.77
Total	271,668.38

Peterborough.

Cattle	12,765.75
Fertilizers	386.00
Hides	5,750.00
Hair, cattle	230.55
Hub blocks	$1,530.00
Pease	506.00
Personal effects (emigrants')	2,280.00
Shingles, cedar	2,473.03
Wool	6,444.00
Returned goods	186.18
Total	32,551.51

Picton.

Apples	224.00
Beans	1,912.06
Barley	2,541.00
Cattle	3,070.75
Goats	5.00
Horses	415.00
Lumber	28.00
Machinery	110.00
Pease	35,018.83
Total	43,324.64

Port Hope.

Barley	6,955.28
Binding twine	31,680.00
Cattle	8,396.00
Emigrants' effects	687.00
Hides	21,362.00
Horses	4,035.50
Lumber	19,873.00
Pease	18,605.25
Returned goods	88.50
Wool	2,424.68
All other articles	1,075.00
Total	115,182.21

Port Rowan.

Bolts, staves, and headings	905.00
Cattle and calves	12,795.75
Emigrants' effects	1,103.10
Fish	206.87
Horses	1,181.00
Lumber	320.00
Seeds, grass	1,332.52
Wool	1,571.54
Total	19,415.78

Port Sarnia.

Animals for breeding purposes	2,697.00
Apples, evaporated and green	44.25
Sturgeon eggs	402.00
Emigrants' effects	5,255.00
Fish, fresh and salted	3,334.69
Flax and tow	1,836.00
Hides and skins	13,881.06
Horses	29,615.00
Logs and timber	2,855.00
Lumber	1,628.80
Returned goods	1,626.97
Shooks, staves, headings, and bolts	6,919.56
Wood pulp	1,887.50
Wool	5,451.51
Beef, fresh	134.50
Bones	132.00
Cattle	2,953.00

Glass, window	$303.58
Paintings, oil	310.00
Total	81,267.51

Port Stanley and St. Thomas.

Beans	286.50
Bran	1,190.50
Cattle	5,456.00
Flax	11,403.65
Horses	2,500.00
Lumber	900.00
Wool	5,965.64
Staves	24,262.82
All other articles	395.20
Total	52,360.31

Prescott.

Crude mercury fulminate	29,476.68
Fur skins	132.00
Hides, tails, and skins	5,359.22
Horses	3,119.50
Lumber	239.36
Returned goods	3,405.70
Specimens	295.00
Whisky and bottles	1,143.00
Wool	764.00
Wool skins	3,078.00
Total	47,010.46

Rat Portage.

Fish, fresh	10,076.76
Fish eggs (caviar)	1,080.00
Settlers' effects	401.60
Sundries	504.03
Total	12,062.39

St. Catharines.

Bicycle chains	1,118.90
Bricks	192.00
Calcium carbide	1,762.00
Haircloth	4,971.60
Hides	590.86
Hair, horse	209.00
Nursery stock	1,229.10
Paper stock	353.11
Rudder	166.00
Tobacco	222.87
Wood pulp	988.08
Wool	1,831.90
Total	15,068.11

Sault Ste. Marie.

Emigrants' effects	471.25
Fish	12,539.47
Horses	1,308.95
Laths and shingles	6,205.13
Lumber	314,548.16
Pine:	
Pickets	5,631.62
Saw logs	712,224.44
Pulp wood	128,899.75
Railway ties	$17,616.80
Wood pulp	778.62
Miscellaneous	755.40
Total	1,200,979.59

Stanstead.

Horses	1,275.00

Stratford.

Barley	746.62
Beans	408.45
Bran	1,455.75
Bones	195.00
Cattle	2,448.00
Emigrants' effects	4,808.65
Flax and tow	94,810.58
Paper stock	223.50
Returned goods	145.90
Tobacco	109.90
Wool	3,298.00
Total	108,650.35

Toronto.

Animals for breeding purposes	3,085.00
Apples	450.00
Barley	19,296.00
Beef	734.04
Bones	5,425.49
Books	1,665.00
Bullion, gold	28,450.00
Cattle	68,550.50
Chemical products	1,363.78
Cork wood	515.68
Emigrants' effects	40,825.06
Fertilizers	2,996.73
Furs	523.00
Hides and skins	11,222.33
Horses	15,879.50
Jewelers' sweepings	2,375.00
Lumber and shingles	41,919.84
Rags	9,392.06
Returned goods	7,427.18
Scrap rubber	3,425.86
Seeds	5,995.08
Sundries	4,341.77
Tar and pitch	3,473.49
Tea	37,665.61
Whisky	10,687.43
Wool	131,217.95
Total	458,908.38

Trenton.

Barley	2,311.00
Bolts	1,071.00
Curtain sticks	327.11
Hides	20,170.75
Emigrants' effects	825.00
Horses	500.00
Laths	1,949.17
Lumber	84,319.28
Posts	1,077.28
Pulp wood	2,117.50
Shingles	29.40

Spar	$5.00
Wool	5,400.00
Total	120,102.49

Wallaceburgh.

Cattle	512.50
Flax, unhackled	5,233.00
Logs	14,715.00
Staves, bolts, etc	28,359.60
Returned goods	75.00
Wood, cord	3,031.50
Total	51,926.60

Wiarton.

Cattle	9,924.00
Fish	22,000.00
Lumber	6,705.45
Ties, cedar	1,736.40
Wool	2,300.00
Total	42,665.85

Windsor.

Beans	289.50
Beef, dressed	214.00
Cattle	610.00
Coal-tar color	1,761.00
Emigrants' effects	84.00
Gas, natural	39,480.00
Hay	231.00
Hides and skins	891.23
Horses	4,010.00
Returned	8,180.00
For exhibition purposes	11,110.00
Logs:	
Maple	462.00
Elm	59,306.00
Poles and posts	1,452.15
Rags	2,165.50
Railway ties	6,937.35
Salol	134.40
Staves	50,381.12
Tallow	117.00
Tea	1,810.48
Timber	23,637.22
Whisky	65,480.15
Wines and liquors	416.50
Wool	1,296.46
Total	280,457.06

Wingham.

Cattle	6,893.00
Emigrants' effects	1,071.00
Flax	3,109.00
Hides	355.00
Lumber	232.00
Wool	1,400.00
Total	13,060.00

PRINCE EDWARD ISLAND.

Alberton.

Blueberries	1,625.00
Emigrants' effects	246.00
Lobsters	2,629.50
Total	4,500.50

Charlottetown.

Agricultural products:	
Hay, pressed	$1,016.35
Potatoes	430.90
Horses	292.50
Emigrants' effects	970.00
Fish:	
Canned lobsters	69,652.11
Mackerel	422.50
Hides and skins, dry salted:	
Hides	2,727.36
Calfskins	1,722.80
Sheepskins	1,963.92
Wool, washed combings	463.52
Total	79,661.96

Georgetown.

(No exports declared.)

Souris.

Lobsters	706.50
Piano and stool	200.00
Total	906.50

Summerside.

Emigrants' effects	685.00
Lobsters, canned	580.00
Horses	202.50
Hides, dry salted	2,450.88
Potatoes	1,099.50
Wool	8,701.88
Total	13,719.76

QUEBEC.

Clarenceville.

Hay	5,378.50
Horses	1,580.00
Wool	178.06
Lumber	404.17
Cedar shingles	65.00
Total	7,605.73

Coaticook.

Animals:	
Breeding	8,700.00
Cattle	488.00
Horses	1,545.00
Hay	133.00
Hides	158.00
Empty oil barrels (returned)	211.00
Teams of emigrants	1,017.00
Wood:	
Clapboards	15,674.00
Laths	87.00
Total	28,013.00

Cookshire.

Horses	185.00
Wood and manufactures:	
Clapboards	7,317.00
Laths	75.00
Lumber	19,093.00
Poles, telegraph	502.00

Wood and manufactures—Continued.	
Pulp wood	$17,688.00
Shingles	50.00
Ties, railway	2,141.00
Total	47,051.00

Coteau.

Books	150.00
Cedar posts	176.38
Lumber	7,472.86
Shingles	596.35
Steel rails	366.42
Settlers' effects	1,105.00
Total	9,867.01

Farnham.

Beet-sugar machinery:	
Second-hand	13,200.00
Returned	13,200.00
Personal effects	2,282.00
Horses	1,058.00
Hides	432.00
Last-making machinery (returned)	430.00
Bicycle cloth	316.40
Hay	306.00
Total	31,224.40

Gaspé Basin.

Lobsters, canned	2,720.88
Railway ties, cedar	1,305.01
Total	4,025.89

Grenville.

Laths	2,929.35
Match blocks	5,062.50
Pickets	4,137.96
Lumber, sawn	214,436.73
Shingles	1,810.35
Wood, slab	1,044.00
Ties	48.00
Wool	285.20
Total	229,754.09

Hemmingford.

Calves	2,247.00
Horned cattle	434.00
Horses	14,886.00
Personal effects	1,880.00
Tin plate	283.84
Total	19,730.84

Lacolle.

Horses	923.00
Cattle	103.00
Baskets	150.00
Total	1,176.00

Lineboro.

Hides and skins	36,303.00
Logs	10,400.00
Horses	7,293.00
Personal effects	2,075.00
Maple sugar	$900.00
Lumber	823.00
Calves	722.00
Poles, cedar	257.00
Ties, railway	103.00
Total	58,876.00

Megantic.

Lumber, rough	59,432.80
Pulp wood	2,243.00
Wood pulp	12,291.00
Shingles	1,770.00
Clapboards	2,813.00
Railroad ties	8,417.20
Household goods	422.00
Total	87,389.00

Montreal.

Antiquities	637.50
Apatite, ground	530.10
Asbestos	265.00
Ashes, pot	167.00
Bags	323.22
Baskets	685.63
Blue	90.00
Bone black	3,733.90
Books	2,256.14
Bottles	369.38
Bullion	1,650.00
Capsules	158.00
Cartridges	5,037.16
Cement	2,886 02
Church goods	600.00
Clapboards	1,835.50
Copper ingots	1,875.90
Cotton waste	3,052.61
Drugs	1,638.89
Dyes	2,108.18
Fertilizers	1,702.61
Firearms	505.31
Fish:	
Fresh	412.35
Salt	300.00
Furs:	
Hatters' waste	1,394.31
Raw	1,308.00
Gas liquor	858.44
Glassware	304.00
Gold, old	1,600.00
Grease	143.10
Gum	300.00
Hair	262.98
Curled	560.00
Harness	275.00
Hemp	2,890.11
Hides	31,739.28
Horses	13,020.00
Insurance blanks	101.97
Iron, pig	180.00
Jewelry	2,156.33
Jewelers' sweepings	400.00
Junk	575.41
Leather	410.00
Lemons	101,821.60
Liquors	9,611.67

Lumber	$33,480.35
Machinery	2,280.00
Mohair	156.60
Molasses	393.97
Nails, horse	872.00
Oil, castor	196.84
Onions	1,421.00
Oxide of iron	961.50
Paintings	19,280.00
Paper stock	833.89
Plumbago	165.00
Rags	12,745.26
Rennets	200.00
Rollers, wooden	1,260.00
Rubber scrap	1,010.92
Returned goods	66,796.53
Seeds	124.50
Silver	275.00
Skins:	
Calf	16,960.95
Goat	1,784.60
Lamb	1,596.00
Sheep	4,444.25
Raw	1,740.52
Statuary	532.00
Sirup of turpentine	400.00
Sugar	8,000.00
Steel	2,223.94
Tea	107,893.77
Tin ingots	545.00
Tobacco	61,992.40
Trucks	100.00
Wine	285.50
Wool	21,629.30
Other articles	114.00
Total	575,428.19

Paspebiac.

Deals, spruce	265.00
Lobsters	4,485.00
Shingles, cedar	13,972.12
Railway ties, cedar	6,875.55
Total	25,597.67

Quebec.

Horse	50.00
Asbestos, crude	3,500.00
Balsam, Canadian	210.00
Furs, raw	1,591.67
Fish	6,249.20
Glue stock	847.25
Hair, plastering	564.66
Horses, provisions, etc., for lumbering camps in Maine	5,514.16
Household goods	3,639.00
Lumber	46,823.34
Maple sugar	24,550.78
Potatoes	538.75
Pulp wood	7,618.75
Returned goods	7,350.73
Sea grass, crude	564.00
Scows	1,738.00
Sundries	849.05
Total	112,199.34

Rimouski.

Furs, raw	$504.50
Household goods	580.00
Laths	89.30
Lumber, rough	4,398.00
Potatoes	175.00
Sea grass	2,061.45
Shingles, cedar	53,781.82
Ties, railway	32.50
Total	61,712.57

St. Hyacinthe.

Cattle	949.50
Hay	723.00
Horses	2,618.00
Hair:	
Cattle	89.56
Goat	281.05
Plastering	296.06
Lumber	2,498.00
Machine for looms	15.00
Personal effects	3,650.00
Sheep and lambs	529.50
Wool	14,514.95
Total	26,364.62

St. John's.

Asbestos	6,823.25
Asbestic sand	1,313.25
Lumber, ash	1,148.43
Hay	1,557.00
Horses	5,296.50
Hides and skins	525.00
Household goods	610.00
Hemlock joists	951.00
Joists	919.00
Lumber	9,895.24
Timber	1,187.35
Total	30,226.02

Sherbrooke.

Returned goods	617.00
Horses and cattle	1,930.00
Asbestos	16,960.00
Chrome iron	12,544.50
Clapboards	5,835.00
Effects	6,343.00
Fulminate of mercury	19,368.69
Hay	350.00
Hides	370.00
Lumber	36,464.55
Copper matte	6,710.85
Machinery	429.75
Bones	118.00
Brick	116.97
Dynamo	50.00
Patterns	55.00
Maple sugar	3.25
Sulky	50.00
Rolls, steel	50.00
Tobacco	452.90
Tweeds	105.96
Tools	215.75
Poles, telephone	184.25

Ties	$1,233.40
Sulphur ore	12,558.75
Total	123,117.57

Sorel.

Lumber	35,821.38
Emigrants' effects	1,156.00
Indian goods	270.00
Maple sirup	30.00
Total	37,277.38

Stanbridge.

Cattle	829.50
Fence posts	294.00
Firewood	26.00
Hay	7,816.25
Hair	398.90
Hides	828.30
Horses	4,008.00
Logs	37,529.50
Lumber	9,930.72
Personal effects	515.00
Shingles	65.00
Straw	27.75
Ties	7,812.50
Wool	178.06
Total	70,259.48

Sutton.

Lumber	9,526.55
Logs	37,045.00
Personal effects	140.00
Hides	700.00
Hay	144.00
Cattle	829.50
Horses	1,038.00
Total	49,423.05

Three Rivers.

Bog ore	50.00
Household goods	50.00
Hides and raw furs	565.74
Lumber	96,356.96
Mineral water	1,591.00
Oxide of iron	230.00
Pig iron	18,208.10
Pulp wood	38,026.00
Returned goods	50.00
Wood pulp	36,523.64
Total	191,757.44

Waterloo.

Last blocks	1,820.00
Lumber	18,697.40
Total	20,517.40

DUTCH GUIANA.

Paramaribo.

Balata	767.50
Cocoa	210,918.32
Gold	5,379.81
Limes, pickled	$145.80
Sugar	69,411.49
Total	286,622.92

DUTCH INDIA.

Batavia.

Argil	23.26
Coffee	100,972.49
Dammar	36,586.41
Hats	3,058.28
Hides	3,294.53
Nutmegs	126.89
Skins	6,641.69
Sugar	452,854.53
Tea	155.03
Total	603,713.11

Macassar.

Cloves	832.38
Coffee	69,174.79
Gum copal	11,052.28
Nutmegs	6,235.75
Total	87,295.20

Padang.

Coffee	615,716.00
Nutmegs	10,698.00
Mace	3,584.00
Rattans	13,517.00
Cassia	20,501.00
Mat bags	505.00
Total	664,521.00

Samarang.

Coffee	386.52
Cubebs	2,175.44
Sugar	228,955.24
Tobacco	21.24
Total	231,538.44

Sœrabaya.

Kapok	2,154.75
Sugar	515,160.81
Total	517,315 56

DUTCH WEST INDIES.

Aruba.

Aloe	294.50
Bones	101.04
Divi-divi	3,002.00
Skins	458.00
Wood	291.97
Wool	188.80
Charges	1,054.65
Total	5,390.96

Curaçao.

Aloe	3,610.08
Bones	112.56
Coffee	726 00

Divi-divi	$1,361.22
Hides and skins	5,472.29
Returned goods	418.25
Salt	1,610.00
Sundries	118.00
Wood	6,016.37
Wool	339.51
Charges	410.61
Total	20,194.89

ECUADOR.

Bahia de Caraquez.

Cocoa	7,172.20
Coffee	241.10
Hides	804.14
Rubber	5,762.52
Total	13,979.96

Esmeraldas.

Cocoa	193.00
Hides	356.82
Ivory nuts	10,438.50
Rubber	20,306.29
Skins	7.04
Total	31,301.65

Guayaquil.

Cacao	96,673.24
Cotton	315.75
Garza plumes	2,355.36
Gold dust	1,219.42
Hair, cow	16.38
Hides	9,360.00
Hats, straw	2,548.16
Ivory nuts	991.54
Rubber	21,246.90
Ruling machine	400.00
Goatskins	761.59
Total	135,675.54

Manta.

Cocoa	33.08
Coffee	30.15
Hides	1,541.30
Heron plumes	142.20
Rubber	42.91
Vanilla	14.22
Total	1,803.86

EGYPT.

Alexandria.

Cotton	498,641.38
Onions	14,468.55
Cigarette paper	443.64
Rags	11,327.32
Sugar	998,972.73
Tobacco	1,150.67
Total	1,505,004.29

Cairo.

Carpets	$3,224.78
Cigarettes	1,287.25
Gum arabic	1,643.08
Senna	10,924.61
Skins	5,685.78
All other articles (mostly bazaar goods)	2,741.85
Total	25,507.35

FRANCE.

Angers.

Books	2,011.94
Mine orange	4,511.60
Plants	132.08
Seeds	561.65
Silk	787.06
Printed calicoes	150.46
Wines	144.75
Total	8,299.54

Bastia.

Citrons in brine	5,712.50

Bordeaux.

Annotto	392.19
Biscuits	83.38
Brandy	17,616.96
Brass labels	76.68
Hair, calf	369.15
Capsules for bottles	8,714.57
Cheese	1,387.37
Chocolate	22.84
Clothes	84.10
Codfish	8,110.03
Coopers' materials	115.31
Corks	706.12
Flowers, crystallized	1,296.69
Dry goods	29.67
Bottles:	
Earthen	73.42
Empty	162.47
Wine cases, empty	47.84
Wine extract	27.64
Ferrochrome	2,299.13
Finings	502.88
Fruit juice	154.40
Grease	737.06
Gum	26,758.21
Labels	185.65
Liqueurs	18,721.14
Macaroni	7,179.51
Manganese ore	51,650.37
Meat	2,436.20
Mineral water	366.97
Mustard	3,473.56
Nuts	10,452.11
Ocher	676.75
Olive oil	108,008.00
Paper	48,515.33
Parchment	54.14
Personal effects	559.70
Fruit preserves	120,733.07

Prunes	$597.98
Rags	39,032.34
Rum	25.95
Sardines	68,671.15
Sirup	34.31
Skins	41,096. 8
Bottle covers, straw	68.41
Sundries	67.95
Talc	1,373.15
Tapioca	46.11
Tartar	19,969.03
Truffles	8,898.43
Vanilla	4,085.50
Vegetables in cans and jars	112,897.81
Vinegar	623.72
Washing blue	627.25
Wine	234,686.74
Wool	1,425,807.06
Total	2,401,389.51

Boulogne-sur-mer.

Flint pebbles	445.53
Rags	5,302.24
Total	5,747.77

Brest.

Sardines	24,102.45
Sprats	7,760.53
Petits pois	1,061.38
Cottons	898.70
Rag	1,632.14
Total	35,455.20

Calais.

Chalk	2,852.78
Lace	671,200.10
Laines	3,394.39
Sugar	270,843.70
Velveteen	4,244.32
Total	952,535.29

Cannes.

Almond meal	373.98
Confectionery	425.56
Filtering paper	168.08
Linen	1,561.71
Oil:	
Almond	1,921.41
Olive	10,501.96
Perfumery	260,948.24
Pottery	673.52
Total	276,574.46

Caudry.

Lace goods	41,962.70
Tiles	6,737.19
Spindle, metal	121.78
Total	48,821.67

Cette.

Drugs	1,636.20
Essences	1,676.20
Lithographic stones	2,361.94
Tartar	$35,410.60
Tissues	630.71
Wine	1,865.11
Total	43,580.76

Cherbourg.

(No exports declared.)

Dijon.

Brass musketoons	342.78
Buckets	1,062.04
Hardware, machinery, and tools	5,558.15
Lace goods, linen	13,907.34
Macaroni	1,402.17
Spectacles	1,565.70
Pipes and smokers' articles	5,957.97
Socks and wood shoes	259.10
Watches	4,723.89
Wines and liquors	44,570.20
Wood sticks	263.20
Total	79,612.54

Grenoble.

Cheese	14,446.74
Fasteners, glove	549.95
Gloves	320,842.87
Liqueurs	3,548.09
Pastes, alimentary	436.58
Skins, dressed	400.24
Walnuts (kernels and in shell)	11,879.05
Wool, raw	2,081.99
Total	354,185.51

Limoges.

China	381,864.75
Skins, geese	1,341.63
Hair, rabbit	6,550.00
Total	389,756.38

Lorient.

Pease, canned	9,911.81
Sardines	14,301.60
Total	24,213.41

Marseilles.

Absinthe	2,394.75
Almonds	17,247.10
Argols, tartar	61,124.50
Asphalt	2,663.30
Cement	4,962.00
Chloride of lime	10,522.35
Fruit, candied	1,050.40
Pulp	4,822.30
Drugs	10,131.60
Glue	14,590.40
Glycerin	9,496.65
Goatskins	206,261.05
Gum	6,796.30
Hair, animal	15,212.50
Macaroni	12,830.70
Mineral water, natural	2,080.20
Marble	5,422.90
Ocher	19,814.45

Oils:	
Cocoanut	$28,721.10
Essential	1,267.25
Machinery	12,054.75
Olive	60,507.55
Sesame	3,528.65
Paper	9,220.45
Rags and old rope	14,848.50
Skins, rabbit	2,756.75
Seeds	7,033.60
Silk	7,389.30
Soap	16,304.25
Sundries	17,114.10
Tar and pitch	835.80
Vermouth	18,155.80
Walnuts	24,249.10
Wine	1,083.45
Wood for pipes	10,207.25
Woods	2,709.45
Wool	350,243.75
Total	995,654.30

Mentone.

(No exports declared.)

Monaco.

Spirits	679.36
Wine	232.08
Total	911.44

Nantes.

Imitation gems	1,051.06
Macaroni	337.20
Pease, canned	9,807.87
Sardines	30,098.28
Sprats	2,579.91
Total	43,874.32

Nice.

Oil olive	10,212.19
Painting	656.91
Total	10,869.10

Pau.

Violets, crystallized	200.00

Rheims.

Buckles	274.96
Caoutchouc	2,214.05
China ware	12,929.75
Cotton goods	7,824.19
Drugs and chemical stuffs	35,463.70
Glass:	
Ware	2,871.50
Plate	3,225.56
Watch crystals	770.52
Carriage attachments, iron	214.15
Printing designs, steel	1,040.90
Lithographic cards and maps	137.48
Machinery	135.54
Silk, shoddy, and wool waste	63,601.52
Statuary	1,123.98
Hats, straw	3,089.45
Wall paper	$291.96
Willow ware	8,410.32
Washing blue	1,129.55
Wine (champagne)	613,863.52
Wool	1,471.23
Woolen textiles	189,108.06
Sundries	1.93
Total	949,193.82

Roubaix.

Dress goods	1,375,560.38
Grease	3,564.09
Leather goods	286.90
Machinery	3,523.90
Potash	1,300.97
Upholstery goods	69,022.67
Vestings	410.35
Wool	165,560.97
Tops	32,863.69
Waste	42,078.16
Yarns	336.10
Stone, worked	671.44
Total	1,695,179.62

Rouen.

Calfskin padding	2,552.60
Cast-steel findings	280.00
Chloral	779.99
Cobalt	917.31
Cotton	1,217.25
Prepared white bristles	1,046.00
Rags	6,943.77
Musical instruments	3,954.54
Caoutchouc surrogate	1,984.45
Wool, white angora	697.14
Total	20,373.05

St. Etienne.

Books	123.73
Braids	8,840.97
Button stock	5,821.45
Cheese	6,417.74
Gloves	8,578.07
Knives	191.94
Lace	26,274.05
Locks	381.31
Mineral water	173.70
Peppermint	108.72
Fruit preserves	132.16
Rat traps	8,380.04
Ribbons:	
Silk	36,569.97
Velvet	64,557.26
Elastic	806.38
Stone, cut	632.84
Total	167,990.33

Toulon.

Immortelles	124.04
Bauxite	10,514.87
Total	10,638.91

Troyes.

Hosiery	$119,985.80
Kid gloves	64,301.17
Tissue paper	321.78
Total	184,608.75

FRENCH NORTH AMERICA.

St. Pierre (Miquelon).

Codfish, dry (in bond)	10,594.71
Herrings, salt	227 50
Total	10,822.21

FRENCH WEST INDIES.

Guadeloupe.

Bay oil	108.34
Vanilla beans	936.75
Total	1,044.09

GERMANY.

Aix la Chapelle.

Buttons, agate	4,967.76
Chemicals	53,341.32
Glass, looking and rough	8,367.67
Gloves, kid	20,475.87
Hooks and eyes	6,225.65
Linen-twine mesh	1,729.78
Miscellaneous	1,296.10
Mineral water, natural	6,699.30
Paper	66,745.78
Pins and needles	20,026.33
Sugar, beet	8,568.00
Woolen cloth	411,121.15
Total	609,564.71

Annaberg.

Cotton goods	704.66
Hosiery, cotton	951.81
Linen goods	587.25
Paper ware	1,738.76
Tinsel goods	513.97
Toys	29,262.74
Trimmings	163,888.01
Wooden ware	682.88
Total	198,330.08

Augsburg.

Books	6,846.03
Chemicals	3,249.16
Metal paper	2,979.04
Watch mainsprings	2,900.18
Musical instruments	2,338.99
Paper, manufactures of	2,204.54
Statuary	2,170.79
Thread, cotton	1,388.77
Mathematical instruments	1,219.32
Steel strips	890.40
Drawing paper	732.70
Matches	456.53
Glassware	$163.90
Miscellaneous	811.87
Total	28,352.22

Bamberg.

Acetic acid	1,958.50
Basket ware	40,703.91
Beer	2,541.03
Carbons for electric lights	236.76
China ware	82,717.22
Grindstones	660.23
Hops	2,868.89
Miscellaneous	423.11
Steel manufactures	8,573.24
Total	140,682.89

Barmen.

Beltings and bone casings	8,766.03
Braids, featherstitch, galloons, trimmings, etc	204,705.65
Button stuffs	10,529.10
Buckles and buttons, hooks, eyes, etc	28,678.14
Chemicals and dyes	328,304.89
Cutlery	653,236.30
Hardware	40,437.73
Hatbands and ribbons	241,231.80
Laces, boot and shoe	61,180.84
Laces, linen	104,261.08
Machinery	1,263.95
Miscellaneous	15,231.17
Needles and pins	31,371.58
Nickel	4,139.16
Paper	16,548.89
Provisions	5,074.33
Silk and cotton mixed goods	173,008 56
Upholstery goods	49,210.75
Woolen mixed and other piece goods	125,222.44
Yarn	13,431.47
Total	2,115,833 86

Berlin.

Albums	70,638.90
Artificial flowers	5,274.00
Astrakhans	35,647.10
Books and printed matter	11,367.15
Chemicals and drugs	137,991.35
China and earthen ware	18,051.90
Chromos and photographs	82,126.15
Colors	90,682.60
Dress goods (velvets, plush, woolen and cotton cloth)	76,876.00
Fancy feathers	48,871.00
Glassware	5,632.80
Gloves	133,370.00
Glove leather	76,283.80
Glucose, dextrin, and potato flour	8,725.30
Hides, furs, and skins	63,225.00
Human hair (wigs)	5,370.50
Instruments:	
Optical and scientific	35,167.60
Musical	8,257.80

Lanolin	$1,342.10
Leather goods	4,878.05
Leather glue	6,927.20
Linen goods	32,769.35
Metal ware and machinery	29,953.00
Paintings	3,463.55
Paper ware	31,385.20
Rags	113,233.25
Ready-made clothing	16,571.70
Shawls	19,892.10
Sheep guts and rennets	39,209.10
Trimmings and embroideries	88,043.85
Toys	27,897.65
Wine, liquor, and fruit juice	10,115.95
Yarns, mohair	34,545.90
Zinc goods	3,940.30
Sundries	33,432.65
Lighting objects (mantles, fixtures, etc.)	10,380.90
Pitch	1,710.25
Umbrella sticks and handles	2,498.20
Wool waste and skin wool	9,900.30
Total	1,438,649.50

Brake-Nordenhamm.

Glassware	1,216.02
Corks	2,612.62
Machinery	195.14
Total	4,023.78

Bremen.

Potash, black	8,652.19
Books, stationery, etc	5,207.45
Cement	13,118.87
Corks and cork wood	6,752.19
Glass and earthen ware	6,469.44
Household goods	675.92
Jute	2,704.86
Magnesium powder	2,210.43
Pictures	3,240.57
Pork	1,951.60
Provisions	5,279.17
Prune juice	5,064.64
Rags	4,425.46
Rattans	21,300.11
Rice	470,916.89
Ship model	1,666.00
Sundries	2,274.10
Tobacco	132,749.67
Whisky	147,829.41
Wine, beer, and liquors	4,823.88
Wool	10,750.47
Woolens	843.22
Wool grease	9,811.85
Wrapper	1,552.65
Total	870,271.04

Bremerhaven-Geestemünde.

Beer	1,804.40
Birds and animals, live	1,330.94
Brooms	540.98
Corks	601.42
Drugs, etc	155.64
Paper	$2,397.41
Sugar	192,454.14
Miscellaneous	28.32
Total	199,313.25

Brunswick.

Asphalt	5,087.00
Animals, live	2,568.00
Books and printed matter	2,612.00
Cement	5,513.00
Chemicals, colors, etc	65,635.00
Glass	12,967.00
Gloves, leather	59,942.00
Instruments, optical	2,204.00
Linen	2,824.00
Manure salts	29,160.00
Provisions (canned vegetables)	1,886.00
Sausage	502.00
Sugar:	
Raw	2,160,675.00
Refined	6,405.00
Sundries	6,218.00
Total	2,364,198.00

Cassel.

Barytes	4,073.25
Baskets	1,827.50
Clay	12,372.97
Calfskins	5,422.67
Colors, chemicals, etc	2,277.45
Earthen and glass ware	1,417.13
Gloves (lamb and schmaschen)	25,689.12
Iron and metal ware (corset steels, capsules for bottles, etc.)	2,756.92
Artificial eyes	266.45
Paper	2,635.56
Toys	1,611.32
Woolen flannels and felt shoes	711.93
Wine	119.00
Total	61,181.27

Cologne.

Aniline salt and aniline colors	33,566.54
Sugar, beet root	1,420.85
Chemical apparatus	726.45
Chocolate and confectionery	83,206.02
Clay pipes and clay	5,097.83
Cologne water	1,762.53
Dyes, chemicals, and colors	24,147.17
Earthenware	40,765.51
Felt	2,504.07
Horn strips	1,830.66
Iron, spiegel and bar	3,624.58
Leather and leather goods	22,488.11
Mineral water	158,667.91
Orange mineral and red lead	31,483.49
Potash	54,858.60
Rags, new and old	31,222.91
Silk plushes and velvets (cotton mixed)	46,351.82
Steel wire and rods	11,867.35
Sundries	22,988.05
Tin acid, or tin oxide	13,799.12

Wine	$47,503.94
Zinc white and zinc oxide	11,676.41
Total	651,559.92

Crefeld.

Cotton goods	24,337.54
Chemicals	46,930.13
Paper ware	27,559.28
Ribbons	29,274.98
Silk, spun	58,081.30
Sundries	33,061.11
All-silk goods	40,884.65
Half-silk goods	240,570.22
Velvets	553,762.85
Cotton	97,239.04
Total	1,151,701.10

Cuxhaven.

(No exports declared.)

Eibenstock.

Baskets	105.33
Brushes	919.40
Chemical colors	1,968.49
Corks	126.58
Cotton hose	325.82
Gloves, leather	98,768.86
Laces:	
Tidies	1,952.01
Curtains	8,679.92
Metal ware	769.04
Paper and paper ware	31,396.93
Toys	1,034.15
Trimmings	61,546.83
Total	207,653.36

Frankfort.

Albums, books, and photographs	9,044.00
Aniline dyes and colors	411,441.17
Asbestos and asbestos goods	5,702.75
Cement, portland and other	22,257.48
Clay	14,053.29
China, porcelain, and earthen ware	12,686.31
Colors (not aniline), drugs, and chemicals	129,684.06
Fancy goods, miscellaneous	8,296.87
Glassware	9,873.29
Hair, prepared and raw (cattle, hare, coney, etc.)	37,461.51
Hatters' fur	6,856.21
Hides and skins	417,120.98
Leather and leather goods	15,534.05
Machinery and tools	4,297.93
Mineral water	22,918.27
Optical goods and instruments	11,357.90
Paper (colored and photographic, etc.)	35,462.41
Platinum and platinum wire	79,937.32
Sausages	4,896.04
Seeds and plants	1,752.68
Silverware	2,280.09
Soap	3,439.12
Wines (still and sparkling), liquors, etc	24,993.30
Wood pulp	$683.08
Wool	58,711.67
Gelatin	26,917.32
Metal ware	3,301.37
Capsules and tin foil	5,827.55
Total	1,386,788.02

Freiburg.

Agate and rock-crystal goods	128.00
Artificial gum	190.20
Books and religious articles	20,549.45
Buttons	8,754.05
Chemicals	6,361.10
Clocks and parts of	7,861.60
Colors	1,362.10
Cottons and woolens	203,863.15
Engraved rollers	1,186.55
Gum arabic	1,445.25
Hosiery	160.00
Microscopical glasses	204.55
Musical instruments and parts of	4,388.45
Paper hangings	12,983.20
Photographs	4,512.40
Ribbons	337.40
Rollers, not engraved	113.00
Silks and half silks	32,321.75
Steel wool and shavings	2,010.20
Thread	1,555.95
Tracing paper	103.80
Wine	287.50
Total	310,679.65

Fürth.

Bronze powder, aluminium, and leaf metal	75,749.89
Books, chromos, and advertising cards	13,655.71
Brushes and raw hair	5,195.65
Chicory	8,134.68
Druggists' articles	379.85
Embroideries	1,116.68
Glass (plate, window, and mirror)	322,721.57
Horn, manufactures of	406.18
Household utensils	2,387.85
Lead pencils, pencil boxes, erasers, etc	19,253.15
Machinery, glass polishing	746.37
Mathematical and optical goods	6,892.86
Oil, refined	1,029.35
Paper (gold, silver, metal, and colored)	14,631.22
Toys and fancy goods	169,511.65
Total	641,812.66

Gera.

China ware	12,349.15
Ivory buttons	13,449.06
Leather	1,831.40
Gloves	57,165.12
Miscellaneous	2,753.97
Musical instruments	1,496.19
Sausages	325.35

Shoe findings	$304.64
Woolen goods	487,645.75
Total	577,920.63

Hamburg.

Baskets, cane ware, and rattan	6,044.86
Sugar (beet, raw, and grape)	3,455,389.94
Bristles, feathers, and horsehair	23,189.53
Coffee	50,911.66
Chemicals, drugs, dyes, colors, paints, etc	74,306.03
Canned meat, fish, and vegetables	108.90
Fancy goods and objects of art	13,195.24
Grains, plants, seeds, and fruits	32,268.67
Gutta-percha:	
Crude	5,794.70
Paper and manufactures	17,933.32
Herrings and other fish	878.14
Hair, human and animal	25,691.64
Haircloth	1,666.43
India and hard rubber:	
Crude	119,730.07
Manufactured	16,974.16
Ivory, raw	4,101.53
Leather goods (galoshes) and glue stock	6,264.68
Liquors (malt and distilled), wines, spirits, and fruit juices	6,681.45
Miscellaneous	18,725.33
Metal:	
Goods and hardware	11,372.48
Raw	1,483.05
Musical and scientific instruments	623.98
Paper	9,805.79
Manufactures	570.75
Cement, portland	326,736.70
Rags waste paper, cuttings, baggings, etc	168,908.28
Raw hides and skins	43,664.90
Rennets, guts, and bladders	8,999.50
Wool	7,354.50
Woolen goods	3,151.82
Tobacco, raw	164,379.75
Tea	2,289.65
Total	4,629,197.43

Hanover.

Ammunition	7,961.12
Asphalt	11,359.62
Birds and pet animals	1,361.56
Books	1,189.19
Cement, portland	75,548.67
Chemicals	29,501.78
Drawing ink	296.99
Earth, manufactured	1,648.93
Feathers and down	4,497.02
Filtering apparatus	1,304.47
Gloves, leather	8,277.07
Grease, wool	17,451.26
Hams and sausage	4,106.73
Instruments, scientific	1,030.78
Lampblack, printers' ink, and colors	2,051.08
Linen	8,244.08
Lithography	$3,752.89
Matches	852.00
Miscellaneous	1,223.76
Paper	556.95
Paper stock, rags, etc	20,783.43
Rubber goods	6,965.77
Silks and half silks	17,376.88
Ultramarine	395.48
Velvets	3,355.80
Total	231,093.31

Kehl.

Books, stationery, and paper ware	3,033.77
Chicory or substitute for coffee	2,614.94
China, glass, porcelain, stone, and earthen ware	9,331.18
Dyes, drugs, and chemicals	2,439.42
Flowers, artificial	156.67
Glassware, watch and spectacle	10,650.30
Hair:	
Prepared and raw	8,532.31
Nets	135.66
Hats (straw, palm, and panama)	1,380.12
Ironware (enameled, etc.)	105.38
Leather, hides and skins, etc	172,775.58
Leather goods	2,456.22
Lithographs	1,572.12
Papier-maché articles	1,172.23
Pasteboard goods and paper boxes	1,283.87
Rags, carbonized	13,564.21
Silk goods, velvets, plushes, etc	1,023.27
Smokers' articles, snuff, etc	1,110.69
Wine, brandy, beer, and liquor	1,552 42
Woolen goods	69,299.83
Total	304,190.19

Kiel.

Glazed papers	288.80
Ships'-bottom paint	1,032.05
Pepsin bitters	1,710.95
Utilities for ships' engines	204.85
Total	3,236.65

Königsberg.

Amber and ambroid	17,108.98
Bristles	7,013.81
Flax	96.96
Hemp	2,592.66
Jute bagging, old	364.67
Rags	49,562.41
Rubber shoes, old	3,350.17
Seeds	13,059.25
Total	93,148.91

Leipsic.

Books, periodicals, newspapers, etc	96,751.15
Bristles	68,333.57
China ware	796.09
Chromos and fancy paper, etc	25,087.77
Cocoa butter	2,634.78
Essential oils, chemicals, colors, drugs, etc	92,569.37
Furs and skins	630,502.84

Instruments (musical, optical, scientific, surgical, etc.)	$16,120.15
Machinery and ironware	10,924.19
Music, printed	14,115.10
Woolens (dress goods, tops, noils, yarns, waste, carpets, etc.)	189,113.99
All other articles	2,890.78
Total	1,149,839.78

Lübeck.

Hair, animal	675.23
Household goods and personal effects	286.90
Ironware, enameled	317.14
Ropes, old	1,125.90
Jute baggings, old	770.66
Rubber shoes, old	4,112.40
Preserves	3,825.00
Rags	18,392.14
Spinning wastes (threads)	651.90
Tar	923.60
Total	31,080.87

Magdeburg.

Accordions	6,084.32
Bichromate of potash	5,584.12
Caps and detonators	350.40
Carbonate of potash	1,219.49
Chloride of magnesium	1,744.71
Dental materials	2,406.36
Earthen and hollow ware	3,525.18
Kainit	53,143.46
Kieserit	4,835.37
Lambskins	5,109.40
Gloves, leather	183,509.38
Machinery	4,656.93
Manure salt	28,864.18
Muriate of potash	170,619.57
Potash, refined	2,639.29
Saccharine	19,535.47
Seeds	3,867.24
Sugar:	
Raw	3,806,012.59
Refined	194,706.31
Sulphate of potash	38,682.55
Wool, raw	2,134.95
Total	4,539,231.27

Mannheim.

Celluloid goods	2,936.10
Cement, portland	42,813.63
Chemicals and drugs	210,992.62
Cleaning waste	3,632.35
Coffee substitutes	1,447.04
Colors and dyes, aniline	296,006.19
Copper refrigerator	502.32
Corks	2,875.42
Cotton tare	4,587.59
Filtering paper and materials	717.36
Furniture and household goods	623.70
Gelatin	5,134.17
Glass, plate	1,707.06
Glue	9,108.96
Leather, patent	242,116.63
Machinery, filtering	$5,325.62
Pencil sharpeners	735.80
Pitch	567.15
Pumice stone	797.90
Rags, paper, and new cuttings	4,536.63
Ropes, hemp	4,373.08
Sheep casings, salted	3,815.41
Skins, lamb	15,105.04
Soot	109.24
Tar oil	326.75
Wines	11,041.01
Wood pulp, sulphate of wood pulp, and cellulose	16,950.44
Total	888,885.21

Mayence.

Aniline colors	35,853.28
Agate ware, jewelry, and imitation jewelry	51,631.88
Aluminium plates	1,101.88
Printing black	1,938.10
Cement	40,672.83
Chemicals	114,844.13
Capsules	1,038.23
Earthen and glass ware	11,374.43
Glue	7,852.00
Hops	927.70
Leather	23,807.59
Machines	284.37
Oil	271.57
Oil paintings	146.52
Paving tiles	4,388.31
Books, printed	508.31
Music, printed	361.59
Fruits, preserved	1,404.17
Saws	1,394.12
Wine	222,362.31
Watches	751.18
Sundries	926.16
Total	523,940.66

Munich.

Apparatus	1,618.40
Artificial flowers	1,321.26
Beer	22,609.88
Books	2,787.12
Brushes	8,110.14
Chromos	6,946.49
Colors	1,053.67
Hair, curled	4,088.16
Embroidery	1,151.32
Furniture	973.42
Glass paintings	13,301.11
Glue	860.51
Gold and metal paper	4,989.32
Hides	7,145.14
Journals	1,716.74
Leaf metal	1,394.63
Gloves, leather	60,867.17
Oil paintings	15,964.68
Philosophical instruments	1,192.31
Photographs	1,994.80
Plaster casts	3,839.89
Statuary	7,235.20

Sundries	$1,336.67
Wax wares	1,252.83
Total	173,750.92

Neustadt.

Box	297.83
Furniture and household goods	357.86
Glassware (hollow), watch crystals, and spectacle glasses	19.05
Gun wads	408.89
Musical instruments and works	122.86
Metal wreaths and ware	208.81
Paper	11,302.44
Scales	1,056.64
Wines and brandies	16,532.06
Woolen and worsted cloths and clothing	757.76
Total	31,064.20

Stuttgart.

Chicory	16,038.48
Colors	15,910.45
Corsets	25,235.17
Cotton goods	3,915.91
Drugs and chemicals	13,255.61
Illustrated periodicals and books	7,439.04
Jewelry	1,090.79
Land produce	7,571.54
Leather	927.25
Linen goods	230.05
Metal ware	21,281.66
Miscellaneous	23,857.03
Musical instruments	61,718.28
Paper	267.18
Professional and scientific instruments	6,223.93
Pumice stone	2,319.12
Watchmen's detectors	2,132.19
Wine and liquor	677.73
Wooden ware	418.07
Woolen ware	124,753.43
Total	335,262.91

Weimar.

Booklets	6,725.88
China	96,746.35
Dyes, drugs, and chemicals	1,999.20
Fancy goods and toys	111,117.42
Gloves	19,727.82
Linen, woolen, and cotton goods	62,713.87
Machines	1,923.04
Minerals	1,789.12
Needles	2,566.40
Optical goods	4,959.22
Seeds and plants	1,515.10
Smokers' articles	1,232.12
Sundry goods	956.76
Watches	2,419.03
Total	316,391.33

GIBRALTAR.

Bric-a-brac	971.98

GREECE.

Athens.

Marbles	$177.75
Rugs, oriental	285.00
Total	462.75

Corfu.

(No exports declared.)

Patras.

Currants	38,617.56
Olives	828.05
Total	39,445.61

Piræus.

Cheese	495.96
Fish, dry	32.46
Magnesite:	
Calcinated	485.01
Cliff stone	7,630.90
Rugs	387.00
Sponge	3,124.22
Sundries	10.00
Total	12,165.55

Syra.

(No exports declared.)

Zante.

Laurel leaves	1,030.17

GUATEMALA.

Livingston.

Coffee	16,415.80
Bananas	11,404.25
Deerskins	79.00
Dry hides	306.40
Oranges	7.50
Rubber	207.25
Sarsaparilla	85.75
Seed rice	8.50
Tortoise shell	540.00
Total	29,054.45

San José de Guatemala.

Coffee	237,812.90
Hides, dry	3,590.74
Rubber	1,472.80
Silver	6,002.50
Various merchandise and personal effects	65.00
Total	248,943.94

HAITI.

Port au Prince.

Cocoa	2,639.50
Coffee	19,820.00
Goatskins	6,989.58
Gum guaiac	1,149.84
Hides	4,802.44

Honey	$1,033.48
Logwood	17,479.09
Turtle shell	96.25
Iron cylinders to be refilled	16.00
Total	54,026.18

HAWAII.

Hilo.

Coffee	936.55
Hides and skins	548.20
Sugar	975,298.88
Total	976,783.63

Honolulu.

Bananas	13,132.70
Coffee	9,958.80
Hides and skins	25,965.00
Household goods	1,968.07
Pineapples	4,150.47
Returned goods:	
Empty beer kegs	3,757.75
Bottles	291.75
Miscellaneous	1,821.52
Wine	662.00
Rice	27,433.18
Sugar	4,010,447.06
Sundries	252.50
Wool	149.95
Total	4,099,990.68

Kahului.

Sugar	568,424.21
Molasses	850.00
Hides	124.87
Returned goods	97.88
Household effects	25.50
Taro flour	3.00
Total	569,525.46

Mahukona.

Hides	567.33
Sugar	339,679.20
Total	340,246.53

HONDURAS.

Amapala.

Bullion:	
Gold	72,674.40
Silver	71,310.05
Coffee	269.68
India rubber	262.06
Total	144,516.19

Bonacca.

Plantains	3,560.00
Bananas	2,640.00
Cocoanuts	469.00
Pineapples	30.15
Mangoes	4.00
Cassava bread	$13.50
Parrots	8.00
Total	6,724.65

Ceiba.

Bananas	145,713.70
Cocoanuts	57.75
Oranges	15.25
Limes	113.00
Mangoes	133.00
Plantains	947.55
Pineapples	121.00
Total	147,101.25

Puerto Cortez.

Bananas	51,875.00
Cedar logs	8,840.00
Coffee	10,200.00
Deerskins	608.00
Fustic	320.00
Hides	615.00
Mahogany	1,440.00
Rubber	1,744.00
Sarsaparilla	2,400.00
Total	78,042.00

Ruatan.

Bananas	2,812.50
Cocoanuts	1,822.23
Hides, beef	1.21
Limes	7.31
Mangoes	40.50
Pineapples	58.49
Plantains	728.10
Total	5,470.34

Truxillo.

Bananas	1,550.00
Cocoanuts	480.00
Deerskins	773.77
Hide cuttings	12.20
Hides	1,715.72
Rubber	1,643.20
Sarsaparilla	5,548.55
Total	11,723.44

Utilla.

Bananas	620.00
Cocoanuts	1,167.00
Plantains	338.87
Total	2,125.87

ITALY.

Ancona.

Asphalt	4,684.50
Argols	2,454.57
Musical instruments	122.94
Total	7,262.01

Bari.

.....	$4,341.00
.....	14,537.15
.....	188.40
.....	6,740.90
.....	346.75
.....	3,432.90
....	16,997.95
.....	47.25
.....	594.10
.....	47,226.40

Bologna.

.....	14.51
.....	95,877.13
.....	972.11
.....	221.29
.....	97,085.04

Cagliari.

exports declared.)

Carini.

.....	153,139.73
.....	1,304.68
.....	154,444.41

Carrara.

.....	114,415.23
.....	37,568.15
.....	21,337.47
.....	5,477.85
.....	5,696.35
.....	212.14
s.....	498.71
.....	21.20
.....	185,227.10

lamare di Stabia.

.....	12,008.82
.....	738.76
.....	841.36
.....	134.10
.....	5,054.18
.....	376.20
.....	116,498.55
.....	1,929.57
.....	618.79
.....	255.63
.....	368.12
.....	138,824.08

Catania.

.....	2,109.62
.....	936.80
lk.....	14,509.59
.....	395.54
.....	630.31
.....	4,799.48
and orange.....	5,706.46
.....	4,988.16

Lemons.....	$8,080.75
Licorice paste.....	581.32
Mustard seed.....	6,309.71
Olives in brine	77.73
Olive oil (sulphureous) for manufacturing purposes.....	2,255.68
Oranges.....	37,846.85
Salt, fine (marine).....	1,722.98
Sulphur:	
Flowers.....	20,527.70
Ground.....	3,039.75
Tomato conserve.....	463.63
Wine lees..	2,902.78
Total.....	117,884.84

Civita Vecchia.

Sheep cheese	6,947.35

Florence.

Alabaster statuary.....	13,374.00
Antiquities	3,549.00
Books	512.00
Bronzes	614.00
Furniture	3,317.00
Glassware.....	240.00
Household effects.....	9,678.00
Ironware.....	422.00
Majolica ware.....	1,649.00
Marble statuary..	26,973.00
Mosaic goods.....	903.00
Musical instruments.....	255.00
Olive oil.....	181.00
Orris root.....	2,546.00
Paintings.....	6,665.00
Photographs	595.00
Porcelain ware.....	632.00
Silverware	662.00
Skins	2,073.00
Straw goods:	
Braids.....	10,671.00
Hats.....	33,857.00
Unclassified	1,669.00
Terra cotta.....	315.00
Wine	2,795.00
Total.....	124,647.00

Genoa.

Anchovies.....	4,136.48
Books, old.....	120.08
Cheese	10,612.55
Cotton waste.....	37,822.36
Dyeing extract.....	1,617.95
Earthenware.....	551.75
Filigree	699.06
Fish, in oil.....	905.55
Gloves	670.59
Glycerin.....	3,921.05
Hair, animal.....	241.00
Instruments, musical.....	246.91
Liquors.....	990.09
Marble dice.	205.64
Macaroni.....	8,318.72
Mushrooms.....	527.60
Olive oil.....	40,126.55
Paint	658.80

Pictures	$311.98
Pipes, clay	41.50
Plumbago	572.95
Rice	6,083.56
Sausages	141.31
Silver plate	137.85
Skins:	
Goat	11,802.71
Lamb	192.06
Slates	764.40
Soap	331.65
Talc	1,463.00
Towels	280.85
Velvet	319.48
Wine	4,878.31
Wooden articles	148.50
Total	139,842.85

Girgenti.

Brimstone	271,856.64
Almonds, shelled	9,917.66
Total	281,774.30

Leghorn.

Alabaster works	1,648.63
Argols	43,586.63
Beeswax	1,918.53
Books	310.36
Boracic acid	3,158.85
Brier wood	8,020.78
Castor oil	345.58
Cheese	30,236.26
Citron:	
Candied	13,278.26
In brine	4,929.03
Fruits, dry	1,169.62
Gentian root	229.56
Herbs, dry	177.75
Hemp	26,030.81
Hides, dry	115.81
Juniper berries	803.93
Laurel leaves	247.54
Liquors	47.47
Macaroni	1,823.03
Marble:	
Blocks	10,038.73
Statuary	248.37
Olive oil	138,867.23
Olive nuts	763.13
Orris root	13,136.38
Paintings	28.95
Pumice stone	6,946.72
Rags	41,246.39
Sausages	254.38
Sienna earth	2,823.94
Soap	39,308.38
Stock	18,007.83
Umber earth	3,563.02
Wine	2,083.74
Miscellaneous	214.90
Total	415,610.52

Licata.

Brimstone	164,370.28

Messina.

Argols	$199,864.00
Almonds	2,060.00
Artichokes	30.00
Cheese	680.00
Citrate of lime	14,636.00
Essences	53,913.00
Filberts	3,495.00
Lemons	79,934.00
In brine	718.00
Lemon peel in brine	1,137.00
Lemon juice	5,716.00
Licorice juice	83.00
Cattle hair, limed	362.00
Macaroni	125.00
Oranges	7,314.00
Orange skins in brine	144.00
Olives in brine	754.00
Olive oil	49,359.00
Pistachio nuts	630.00
Pumice stone	11,798.00
Silk, raw	6,498.00
Sumac, extract	378.00
Sundries	432.00
Vinnacia	7,092.00
Wine	186.00
Lees	6,348.00
Total	363,686.00

Milan.

Books	149.86
Buttons	4,161.64
Cheese	10,572.06
Colors	2,819.11
Colored images	648.48
Cotton and silk manufactures	73,831.97
Gloves	41,831.69
Hair, horse	19,196.89
Hats	2,427.17
Hatbands	5,025.57
Liquors	8,680.28
Machinery	224.92
Medicines	4,598.00
Olive oil	204.71
Paintings	915.79
Rice	246.08
Rubber goods	349.83
Silk:	
Manufactures	10,199.47
Raw	838,660.41
Waste	1,709.91
Statuary	154.40
Soap	512.07
Sumac	4,028.11
Wine	24.70
Total	1,031,172.12

Naples.

Argols	124,859.18
Cameos	138.12
Cheese	15,233.76
Church furniture	292.37
Furniture	193.78
Garlic	1,316.45

Gloves	$21,269.09
Gut strings	131.28
Hazelnuts	854.07
Hemp	23,883.10
Hides	1,212.04
Hair, human	4,686.04
Licorice	2,746.84
Macaroni	379.34
Majolica	602.45
Mandolins	302.50
Milk food	555.01
Miscellaneous	6,799.52
Oil paintings	200.34
Olive oil	1,592.52
Onions	102.31
Preserves	7,352.56
Fish, salted	275.09
Sardines	104.36
Seeds	207.06
Semoule	2,081.15
Skins	149.50
Snuff tobacco	202.89
Soap	498.85
Soap stock	13,581.02
Sulphur oil	4,322.01
Tortoise shell	724.60
Wine	6,054.45
Works of art	1,246.04
Wooden statue	193.05
Total	244,342.74

Palermo.

Argols	4,143.00
Brimstone	42,407.00
Cheese	1,429.00
Citrate of lime	17,509.00
Cognac	204.00
Essence	3,480.00
Lemon juice	2,141.00
Lemons	1,022,795.00
Macaroni	6,423.00
Manna	437.00
Mustard seed	2,665.00
Olive oil	4,281.00
Orange peel	511.00
Oranges	83,823.00
Preserved goods	2,318.00
Soap stock	8,443.00
Sumac	108,413.00
Wine	491.00
Miscellaneous	1,662.00
Total	1,313,575.00

Reggio.

Essential oils	12,501.00
Sundries	432.00
Total	12,933.00

Rome.

Antiquities	5,751.47
Bric-a-brac, furniture, silks, etc	4,205.57
Cheese	7,650.35
China	184.83
Cloths, colored	253.45
Engravings	$182.16
Household and personal effects and wearing apparel	3,519.23
Musical strings	756.95
Mosaics	1,389.97
Olive oil	144.93
Paintings	8,586.48
Plaster statue	2,019.00
Sculpture:	
Bronze	812.25
Marble	5,421.74
Bronze and marble	1,288.23
Sienna earth	1,299.84
Wine	599.50
Total	44,085.95

Sorrento.

Cheese	496.97
Garlic	59.30
Lemons	15,647.97
Olive oil	546.49
Oranges	125,340.84
Walnuts	1,854.32
Total	143,945.89

Trapani.

Salt	10,123.04
Wine:	
Marsala	1,313.20
Table	6.00
Oil, machinery	82.32
Tomatoes, preserved	22.50
Pastry	32.60
Total	11,579.66

Turin.

Books	401.35
Cheese	320.40
Felt hats	718.26
Gunstocks	1,077.96
Hair, human	2,752.77
Hemp line	215.06
Plumbago	623.32
Vegetables, preserved	385.03
Silk, raw	8,409.97
Statuary	723.75
Talc	253.60
Vermouth	67,416.57
Matches, wax	2,194.03
Wine	135.10
Wool, washed	2,369.66
Total	87,996.83

Venice.

Antiquities	2,027.29
Bronzes	133.68
Carved wood and furniture	7,294.72
Earthenware	150.23
Eyeglasses	297.70
Glassware and beads	4,011.85
Hemp	73,502.22
Lace	554.55
Marble statuary	150.93

Mosaics	$165.45
Photographs	55.75
Porcelain	41.25
Stuffs	270.18
Sundries	510.62
Total	89,166.42

JAMAICA.

Falmouth.

Sugar	115,707.20
Cocoanuts	110.40
Pimento	29.44
Logwood	1,893.06
Total	117,740.10

Kingston.

Annotto	534.94
Bananas	24,528.86
Cocoa	6,572.12
Champagne	10,611.64
Coffee	26,331.02
Cigars	218.99
Cocoanuts	11.67
Ebony	200.73
Ginger	7,004.25
Goatskins	1,007.92
Grape fruit	17.51
Hides	146.96
Honey	4,964.47
Horns	19.43
Kola tonic	13.62
Logwood extract	3,327.74
Lancewood spars	220.45
Limes	458.18
Lime juice	1,563.11
Merchandise	21.52
Metals, old	9,555.76
Oranges	238.63
Pimento	12,645.08
Pineapples	319.74
Rum	2,034.25
Sugar	66,521.98
Sheepskins	58.23
Sarsaparilla	619.54
Sticks	10.33
Stick handles	14.59
Tortoise shell	207.31
Tobacco	1,562.74
Vegetables	177.21
Wax	1,680.62
Wool	40.39
Total	183,461.53

Montego Bay.

Annotto	56.14
Coffee	351.84
Cocoanuts	243.45
Cylinders, empty	38.19
Logwood	6,094.14
Fruit:	
Bananas	4,648.13
Citron	1.09
Grape fruit	81.60
Limes	$343.82
Mangoes	29.05
Oranges	534.96
Pineapples	523.81
Shaddocks	8.20
Ginger	1,245.38
Hides	49.34
Lime juice	43.06
Pimento	446.04
Skins, goat	165.88
Sugar	57,086.20
Total	71,990.32

Port Antonio.

Bananas	320,875.11
Barrels	307.90
Boxes	4.76
Cocoanuts	8,153.03
Charges	844.92
Crates	119.13
Cucumbers	1.82
Garden eggs	369.24
Grape fruit	43.55
Grape juice	31.04
Lime juice	1,033.32
Limes	545.69
Mangoes	32.72
Nursery stock	2.02
Oranges	2,416.21
Orange seeds	.97
Puncheons	202.45
Pineapples	167.00
Returned goods	227.99
Rum	93.43
Tomatoes	324.04
Yams	.97
Total	335,797.31

Port Maria.

Annotto	5.20
Bananas	282,174.93
Cocoanuts	8,801.02
Coffee	227.28
Cocoa	160.90
Grape fruit	21.30
Ginger	456.98
Skins, goat	89.24
Husks, cocoanut	332.40
Hides, cattle	12.68
Limes	78.44
Logwood	504.40
Lime juice	58.32
Fruit	21.60
Oranges	2,174.60
Pimento	2,313.26
Pineapples	279.36
Sugar	2,880.00
Total	300,591.91

Port Morant.

Bananas	87,114.86
Beans	1.60
Cocoa	129.72

Cocoanuts	$9,218.32
Husks, cocoanut	315.46
Cucumbers	27.38
Garden eggs	142.62
Limes	23.32
Mangoes	72.00
Pineapples	166.52
Sugar	5,384.40
Tomatoes	100.96
Total	102,697.16

St. Ann's Bay.

Annotto	151.00
Bananas	16,023.68
Bat guano	2,940.00
Coffee	10,150.89
Cocoa	66.50
Goatskins	194.75
Grape fruit	156.12
Limes	514.50
Lime juice	40.00
Mangoes	16.25
Oxhides	46.66
Oranges	4,363.12
Pimento	10,999.25
Sugar	19,179.75
Total	64,842.47

Savannah-la-Mar.

Logwood and logwood roots	32,527.27
Pimento	1,567.00
Sugar	63,712.00
Total	97,806.27

JAPAN.

Kanagawa.

Bone, whale	9,289.48
Brimstone	42,435.15
Cotton goods	803.45
Curios	124,679.45
Manganese	9,260.69
Menthol	2,135.65
Miscellaneous	7,054.34
Mushrooms	910.01
Paper goods	34,265.26
Plants	118.17
Silk:	
Goods	1,178,480.12
Raw	2,151,567.65
Straw braid	27,052.35
Tea	2,102,341.26
Total	5,690,393.03

Nagasaki.

Embroidered silk screen	127.00

Osaka and Hiogo.

Antimony	431.07
Bamboo and bamboo ware	17,830.04
Brushes (tooth, hair, and nail)	27,128.41
Camphor	61,129.97
Oil	339.41
Carpets and rugs	$91,169.37
Chillies	1,514.10
Cotton goods	5,470.62
Curios (consisting of lacquer ware, toys, bead screens and blinds, metal ware, ivories, cloisonné, etc.)	35,707.17
Manganese ore	6,882.31
Matting	615,889.58
Matches, safety	496.47
Mineral water	903.40
Paper and paper ware	18,109.32
Porcelain and earthen ware	48,724.13
Rice, brown and polished	69,831.73
Silk goods	3,152.88
Straw braid	10,684.59
Sundry merchandise	3,215.13
Tea	749,506.69
Toothpicks	1,464.14
Vegetable wax	6,504.59
Total	1,776,085.12

LIBERIA.

Monrovia.

Coffee	1,125.00

MADAGASCAR.

Tamatave.

(No exports declared.)

MADEIRA.

Madeira industry and antiquities	239.28
Wine	2,236.33
Total	2,475.61

MALTA.

Squills	244.63
Seed:	
Coriander	335.79
Cumin	1,185.16
Fennel	141.13
Cigarettes	85.26
Tobacco	369.99
Total	2,361.96

MAURITIUS.

Port Louis.

Sugar	210,402.52

MEXICO.

Acapulco.

Coffee	30.00
Hides, dry	12,263.36
Skins:	
Deer	2,517.36
Goat	169.34
Limes	2,950.26
Other fruits	106.57
Rubber	123.22
Total	18,160.11

Chihuahua.

Animals (live cattle)	$86,615.02
Bullion:	
Gold	202,769.08
Silver	142,406.49
Hides, dry	7,692.53
Ores (gold, silver, lead, and copper)	410,782.38
Machinery (returned)	205.71
Sulphides	66,881.85
Total	917,353.06

Coatzacoalcos.

Alligator skins	1,618.16
Crane plumes	145.26
Coffee	86,143.31
Cedar	37,682.95
Deerskins	332.38
Fustic	1,118.88
Guayacan wood	4,063.50
Hides	7,488.60
Horns	103.46
Mahogany	26,349.70
Nacaste wood	297.00
Rubber	223.12
Silver coin of Central and South America	11,147.50
Turtle shell	11.34
Vanilla beans	16.28
Total	176,741.44
Total for March quarter	49,120.33

Durango.

Bones and horns	104.14
Bullion:	
Gold	11,093.09
Silver	11,723.32
Returned goods	85.25
Total	23,005.80

Frontera.

Alligator skins	35,614.80
Coffee	3,677.17
Chicle	23,854.91
Cedar	631.25
Carboys	46.35
Deerskins	1,049.98
Deers	2.50
Fustic	68.68
Hides	11,792.58
Hogskins	123.97
Heron feathers	7,807.17
India rubber	6,898.52
Logwood	191.30
Mahogany	20,708.90
Monkeys	1.50
Parrots	1,866.00
Total	114,225.58

Guadalajara.

Oranges	6,257.80

Guaymas.

Bullion:	
Gold and silver	$278,884.00
Silver	7,658.00
Fish hides	515.00
Watermelons	204.00
Hides, dry	3,392.00
Leather	3,989.00
Machinery (for repairs)	50.00
Ores:	
Concentrates (cyanide process)	46,732.00
Gold and silver	33,427.00
Graphite	761.00
Silver	43,308.00
Sulphide	47,198.00
Rope (returned)	102.00
Pease, dried	506.00
Total	466,726.00

La Paz.

Damiana herb	11.33
Feathers, heron	205.49
Fish fins	121.17
Gold, placer	2,023.00
Hides	4,769.47
Miscellaneous	78.70
Ore	66.62
Sulphurets of silver	92,457.02
Skins, deer and goat	1,549.22
Shells:	
Common	171.26
Tortoise	184.50
Salt	425.50
Total	102,063.28

Matamoros.

Animals, live:	
Cows and calves	26,234.87
Heifers	3,239.11
Bulls	5,827.41
Steers	26,107.68
Stags	6,822.72
Horses	809.67
Mules	135.02
Bones	770.86
Feathers	13.68
Hemp	51.19
Hair	2,361.04
Horns	66.05
Hides, beef	7,170.97
Linen	125.78
Skins:	
Goat	3,495.24
Deer	217.50
Wild hog	241.09
Wild animal	11.62
Kip and calf	198.53
Kid	119.84
Wool	1,266.18
Wax, bees'	60.02
Total	85,346.07

Mazatlan.

Auriferous ore	$4,452.00
Birds	158.00
Coffee	60.00
Concentrates	7,416.20
Castor beans	1,927.50
Fish	21.00
Gold and silver ore, mixed	6,038.33
Gold:	
Bullion	319,205.15
Ore	7,258.22
Coin	4,302.96
Gold and silver bullion	15,450.95
Hides	2,116.66
Lignum-vitæ	423.43
Mexican eagle dollars	52,243.00
Precipitate of silver	73,923.31
Sugar, raw	1,415.96
Silver:	
Tailings	2,465.69
Bullion	651,250.67
Ore	319,644.26
Shrimps	571.13
Silver and lead ores	36,425.47
Shark fins	202.00
Tortoise shell	459.00
Typewriter	202.67
Total	1,507,633.56
Total for March quarter	1,328,494.29

Mexico City.

Returned goods	1,235.00
Antimony	985.72
Books	100.00
Bullion, gold and silver	292,596.55
Broom root	13,113.30
Curios	2,087.68
China	150.00
Copper	965.64
Feathers	250.00
Garlic	940.00
Hides	24,395 00
Ore, gold and silver	140,324.00
Paintings	1,137.50
Skins	300.00
Tobacco, leaf	11,002.50
Total	489,582.89

Mier.

Cattle	16,355.31
Horse	5.08
Skins:	
Goat	491.24
Deer	38.22
Horsehair	38.35
Hides (beef), dry	139.87
Charges	519.50
Total	17,587.57

Monterey.

Bones	163.37
Curios, Mexican	270.91
Hair, animal	7,517.77
Hides, beef	16,626.99
Household goods	$1,096.46
Ixtle	9,361.59
Bags	62.20
Lead, argentiferous	1,889,426.06
Leather	1,213.98
Pepper, red	30.58
Skins	36,555.89
Wheat bran	652.03
Total	1,962,977.83

Nogales.

Bullion:	
Gold	1,100.00
Silver	27,559.00
Burros	413.00
Cattle	288,592.00
Returned	31,739.00
Circus outfit	75.00
Hides, dry	784.00
Horses	939.00
Mules	20.00
Ores:	
Copper	358.00
Gold	42,835.00
Silver	160,397.00
Panocha (Mexican sugar)	109.00
Silk, manufactures of	400.00
Tin foil	25.00
Tobacco, filler	300.00
Watermelons	173.00
Wood for fuel	572.00
Total	556,390.00

Nuevo Laredo.

Returned goods	6,161.25
Pepper, red	312.35
Linen drawn work	364.49
Hides	1,628.33
Skins:	
Goat	4,074.91
Deer	538.90
Wild hog	153.90
Horsehair	443.10
Steers:	
Yearlings	12,688.82
2 years old	3,386.84
3 years old	988.57
4 years old	16.26
Cows	1,738.38
Heifers:	
1 year old	304.80
2 years old	1,005.84
Calves	718.44
Chicle	324.51
Soap	111.76
Grain bags	263.14
Bones, dry	231.14
Coffee	4,264.66
Mexican leather shoes	194.56
White lead	307.34
Total	40,222.29

Parral.

Gold and silver bullion	1,340.85

Paso del Norte.

Returned goods	$2,951.00
Animals, live	265,238.00
Bullion:	
Gold	6,381.00
Gold and silver	9,919.00
Silver	19,097.00
Old gold and silver	1,856.00
Chili	269.00
Coffee	34,307.00
Cotton:	
Goods	678.00
Waste	540.00
Cotton-seed meal	273.00
Feathers, crude	2,087.00
Hats, straw	2,370.00
Hides and skins	3,431.00
Leather shoes	19.00
Linen goods	1,537.00
Melons	409.00
Mexican filigree	103.00
Oil painting	3.00
Onions	559.00
Opals	80.00
Oranges	327.00
Ores	1,387.00
Piloncillo	170.00
Platinum	224.00
Silk goods	24.00
Sundries	265.00
Tobacco	502.00
Woolen goods	30.00
Total	355,036.00

Piedras Negras.

Cattle	90,124.00
Cattle hides	8,625.00
Coal	58,451.00
Copper ore	4,205.00
Goatskins	6,035.00
Hats	382.00
Horsehair	648.00
Oil cake	5,863.00
Returned goods	4,995.00
Sheep	24,653.00
Miscellaneous	310.00
Total	204,291.00

Saltillo.

Ixtle	11,141.91
Goatskins	19,654.03
Bran and miscellaneous merchandise	514.29
Copper and lead bullion	55,087.30
Total	86,397.53

San José and Cape St. Lucas.

Chili, green	83.00
Damiana	125.00
Hides, beef	1,758.00
Skins, deer and goat	72.20
Sugar, brown	$7,048.02
Tomatoes	46.00
Total	9,087.22

San Luis Potosi.

Bones	737.46
Bran, wheat	670.46
Chili peppers	311.37
Copper	22,720.52
Garlic	232.32
Gold bullion	37,451.88
Hides:	
Cow	289.20
Goat	44,987.95
Hair	1,306.70
Horns	8.68
Ixtle fiber	9,940.77
Jute sacks	484.97
Bullion:	
Lead	30,107.04
Silver	601,071.35
Ores	85,166.51
Tannery clippings	218.34
Total	835,705.52

Sierra Mojada.

Ores:	
Silver lead	95,505.12
Silver	64,754.99
Skins:	
Goat	802.74
Cow	85.56
Total	161,148.41

Tampico.

Returned goods	2,852.00
Bones	4,682.00
Bullion	60,974.00
Cedar	30,204.00
Chicle (chewing gum)	67,937.00
Coffee	7,492.00
Coins	2,343.00
Fustic (dyewood)	47,059.00
Hair	4,066.00
Hides	48,476.00
Honey	33,610.00
Ixtle	21,188.00
Jalap	42.00
Plumes	1,981.00
Pottery	129.00
Sarsaparilla	5,097.00
Skins:	
Alligator	2,450.00
Boar	25.00
Deer	966.00
Goat	45,467.00
Rubber	368.00
Vanilla	35,300.00
Sundries	220.00
Total	422,928.00

Toreon.

Cotton lintels	$446.58
Goatskins	2,837.94
Base bullion:	
Gold	33,562.97
Lead	12,835.00
Silver	84,132.42
Total	133,814.91

Tuxpan.

Chapapote	2,271.98
Chicle	15,763.94
Cedar and mahogany	29,109.32
Coffee	1,276.22
Hides	3,142.85
Honey	7,719.63
Fustic	856.55
Rubber	2,902.92
Fish bladders	12.69
Skins:	
Alligator	75.50
Deer	203.86
Vanilla	105,585.95
Total	168,921.41

Veracruz.

Aloes, essence	762.00
Returned goods	556.76
Beans	6,724.48
Bullion, silver and lead	13,008.07
Broom root	13,675.03
Baggage	280.61
Birds (parrots)	81.28
Bicycle parts	101.60
Coffee	1,127,995.95
Chicle	20,581.37
Cigars	1,427.15
Coins, silver and old gold	177.80
Casts, papier-maché	1,524.00
Deerskins	1,212.07
Edibles, Mexican	5.23
Feathers:	
Duck and goose	609.60
Heron, or garza	495.33
Fustic	6,429.40
Furniture	30.48
Hair, horse and cattle	416.81
Herbs, medical	32.43
Horns, cattle	52.83
Household goods	139.19
Honey	1,383.28
Hides	27,197.77
Jalap	2,036.06
Mahogany	1,803.40
Models, iron and wood	1,016.00
Onyx	20,805.91
Ores (silver, lead, and gold)	1,796.80
Rubber	3,462.89
Skins:	
Alligator	254.50
Goat	54,324.77
Hare	73.66
Sea cow	6.07
Squirrel	1.07
Silver bars	$163,149.91
Tobacco	353,409.83
Telegraph instruments	28.44
Vanilla	99,223.70
Total	1,926,293.53

Victoria.

Cattle	39,464.13
Parrots	542.19
Surveyors' instruments	100.99
Study books	150.24
Total	40,257.55

Zacatecas.

Silver ore	141,742.26
Silver and gold bullion	620.95
Dentists' implements and furniture.	177.50
Total	142,540.71

MONTSERRAT.

Sugar, muscovado	15,640.87

MOROCCO.

Casa Blanca.

Coriander seed	631.88
Goatskins	250.00
Total	881.88

Magador.

Goatskins	74,362.08
Sheepskins	226.38
Total	74,588.46

Tangier.

Curios	750.00
Goatskins	22,198.00
Total	22,948.00

MOZAMBIQUE.

Lourenço Marquez.

(No exports declared.)

NETHERLANDS.

Amsterdam.

Aniline colors	2,003.60
Antiquities	3,783.84
Bird skins	1,949.95
Books	2,351.26
Calfskins	2,419.24
Caraway seed	4,472.40
Cassia vera	23,628.72
Cheese	9,323.68
Cinchona bark	42,489.30
Cloves	1,260.17
Cocoa	176,650.84
Cocoa beans	9,317.77
Cocoa butter	96,691.38
Coffee	59,926.76
Diamonds:	
Rough	6,697.15
Polished	5,476.50

Garden seeds	$1,497.50
Goatskins	9,543.86
Gums	543.93
Indigo	1,827.84
Liqueurs	7,060.50
Mace	3,625.19
Madder	603.30
Metallic capsules	741.09
Nutmegs	40,327.12
Oils (Haarlem, etc.)	4,425.88
Paintings	5,858.60
Paper	566.24
Pepper	36,153.24
Glass, plate	40,447.12
Rags and cotton tares	11,526.12
Rice	100,791.64
Rubber	5,613.78
Sardelles	2,922.45
Straw covers and straw boards	8,025.49
Sugar:	
Beet	42,467.43
Refined	575,200.72
Tin, Banka and Straits	109,080.02
Tobacco, Sumatra (15,636 bales)	2,762,868.99
Turf litter	3,005.48
Sundries	2,129.71
Total	4,225,294.96

Flushing.

(No exports declared.)

Rotterdam.

Alum	3,193.45
Beeswax	832.13
Books and printed matter	744.00
Bottles and cases	396.18
Bulbs	160.00
Carboleum	1,134.00
Carbolic acid	1,751.65
Cheese	5,665.01
Chloride of zinc	8,188.60
Church symbols	180.00
Coffee	31,691.93
Earthenware	2,718.26
Emery stone	1,749.68
Empty grain bags (returned)	340.30
Flax and tow	27,677.78
Furniture	472.80
Gin	23,817.96
Hardware (returned goods)	25.00
Hair, human	1,574.00
Indigo	8,601.84
Madder	3,340.67
Matches	275.48
Metal capsules	3,785.56
Mineral water	18,319.27
Nutmegs	11,367.98
Oil	520.91
Opium	1,051.08
Paintings	296.00
Paints	312.57
Paper	273.38
Peat moss	21,962.56
Pepper	7,661.24
Rags and paper stock	28,972.49
Roots and herbs	$1,091.43
Seeds	4,004.96
Silverware	1,256.16
Straw covers	117.58
Sugar	124,947.55
Tin	43,596.26
Tin foil	499.64
Tobacco (1,247 bales)	223,138.92
Tortoise shell	424.00
Wine	565.50
Woolen manufactures	82.94
Total	618,778.70

Schiedam.

Beans	184.00
Candle pitch	716.36
Fusel oil	122.22
Gin	25,045.46
Herrings	632.00
Old rope (paper stock)	378.22
Sardelles	1,490.00
Total	28,568.26

NEVIS.

Sugar, muscovado	53,416.64

NICARAGUA.

Bluefields.

Bananas	187,541.85
Birds, stuffed	208.60
Cocoanuts	100.49
Gold dust	50,828.52
Okra	3.49
Oranges	1.40
Pineapples	215.82
Rubber	50,903.97
Turtles	32.56
Total	289,870.00

Corinto.

Coffee	176,059.56
Hides	8,313.50
Deerskins	4,948.02
Rubber	6,579.01
Cedar logs	244.00
Total	196,144.09

Managua.

Chocolate	182,798.96
Coffee	6,040.12
Feathers	9,103.15
Hides	8,002.71
Walnuts	244.00
Total	206,188.94

San Juan del Norte.

Coffee	60,730.90
Deerskins	297.50
Gold dust	7,900.00

Hides	$5,628.90
Rubber	21,198.27
Total	95,755.57

San Juan del Sur.

Coffee	6,739.40
Deerskins	1,092.10
Hides	789.65
India rubber	1,423.70
Total	10,044.85

PARAGUAY.

Asuncion.

(No exports declared.)

PERSIA.

Bassorah.

(No exports declared.)

PERU.

Callao.

Antiquities, Peruvian	526.50
Compound of silver, lead, and copper	41,416.47
Chloride of copper	327.60
Cotton	1,894.71
Goatskins	679.08
Hides, ox	482.04
Silver-lead ore	5,374.81
Silver ore	12,578.73
Sulphide of silver	6,059.85
Sugar	3,589.00
Total	72,928.89

Truxillo.

Coca leaves	1,249.45
Compounds of silver, etc	1,435.72
Ore	818.55
Sugar	48,623.04
Total	52,126.76

PHILIPPINE ISLANDS.

Manila.

Hemp	599,146.90
Cigars	1,210.29
Sinamay	3,157.22
Ihlang-ihlang	711.15
Handkerchiefs	55.61
Total	604,281.17

PORTUGAL.

Lisbon.

Coffee	20,411.02
Corks	480.76
Cork wood	245,652.76
Cotton waste	666.30
Earthenware	45.31
Guitars	$20.79
India rubber, crude	555,175.80
Personal effects	194.66
Sardines	875.74
Tartar, crude	23,485.33
Wine lees	8,526.89
Toothpicks, wood	1,279.14
Total	856,814.50

Oporto.

Olive oil	100.20
Port wine	34,259.90
Salt	750.00
Toothpicks	1,481.40
Total	36,591.50

RUSSIA.

Abo.

Books, printed	121.85

Batum.

Manganese ore	178,173.82
Licorice root	26,634.48
Wool, fleece:	
Georgian	9,184.52
Autumn	1,449.56
Khorassan	3,501.40
Shirvan rugs	1,550.44
Total	220,494.22

Helsingfors.

Books	449.68

Libau.

Goatskins	82,244.54
Matches	176.43
Total	82,420.97

Moscow.

Albumen of blood	6,673.41
Carriage and harness	262.61
Goatskins	17,623.00
Household goods and personal effects	257.46
Horsehair cloth	435.11
Silverware	267.24
Wool, white (washed):	
Carpet	8,590.16
Fleece	25,816.30
Other	20,798.50
Total	80,723.79

Odessa.

Brass, old and new	88.70
Corn, blighted	488.85
Goatskins	29,655.97
Hemp seed	2,701.71
Manganese ore	21,289.42
Total	54,224.65

Revel.

Tow	$3,653.51
Goatskins	14,500.34
Total	18,153.85

Riga.

Albumen	6,181.23
Books, Hebrew	1,701.86
Hemp	10,394.17
Liquors	284.61
Objects for divine service	431.55
Rennets	2,322.43
Skins	66,095.56
Wool	3,123.17
Total	90,534.58

Rostoff.

Wool	69,087.18

St. Petersburg.

Machines, computing	257.46
Boltropes	3,662.40
Bristles	21,553.18
Bronzes	442.71
Crash	8,143.00
Fish bladders	5,086.70
Flax	17,971.59
Goatskins	22,333.86
Household articles	472.19
Leather and lace articles	142.48
Linen articles	366.12
Liquors	305.46
Lycopodium seed	3,326.37
Oakum, tarred	6,525.88
Platinum	21,142.78
Porcelain ware	1,084.04
Sheet iron	4,229.05
Silverware	710.59
Total	117,755.86

Warsaw.

Books	1,287.90
Hair, human	1,072.82
Total	2,360.72

ST. CHRISTOPHER.

Sugar	209,600.68
Molasses	2,517.56
Skins	629.50
Tamarinds	125.50
Bay rum	32.55
Tamarind sirup	3.14
Limes	15.90
Lime juice	3.14
Licorice seed	.50
Total	212,928.47

ST. VINCENT.

Arrowroot	113.54
Sugar	81,462.63
Annotto seed	85.88
Preserves	$6.38
Sewing machine	4.87
Indian clubs	1.01
Copper, old	235.21
Total	81,909.52

SAMOA.

Apia.

Copra	10,738.00

SIAM.

Bangkok.

Rice (white, cleaned, garden)	3,024.73

SOCIETY ISLANDS.

Tahiti.

Cocoanuts	2,069.60
Copra	16,870.75
Cotton	10,244.20
Desiccated cocoanut	409.30
Fungus	447.42
Logs, hard wood	4.62
Miscellaneous	192.56
Mother-of-pearl shell	35,813.54
Vanilla beans	30,434.46
Wool	119.17
Total	96,605.62

SPAIN.

Almeria.

(No exports declared.)

Barcelona.

Baggings	2,203.00
Capers	291.16
Cotton waste	11,855.09
Hog guts	2,776.64
Licorice	30,794.77
Glycerin	22,466.92
Mineral water	8,781.66
Playing cards	926.70
Red pepper	308.36
Skins	6,629.68
Tartar	21,135.73
Wine	1,511.92
Woolen cloth	275.18
Total	109,956.81

Bilbao.

Iron ore	12,866.56
Straw paper	96.87
Total	12,963.43

Cadiz.

Wine	5,999.72
Cork wood	9,785.74
Cork	3,474.81

Salt	$1,730.10
Books	22.50
Total	21,012.87

Carril.

(No exports declared.)

Carthagena.

Iron ore, manganiferous	13,144.00

Corcubion.

(No exports declared.)

Corunna.

(No exports declared.)

Ferrol.

(No exports declared.)

Garrucha.

(No exports declared.)

Gijon.

(No exports declared.)

Grao.

Hides	11,667.40
Saffron	3,909.20
Wine	1,511.35
Miscellaneous	468.70
Total	17,556.65

Huelva.

Cupreous sulphur ore	93,512.57
Essential oils	607.64
Iron pyrites	26,678.20
Total	114,798.41

Jeres de la Frontera.

Wine:	
Sherry	86,426.82
Red	51.39
Spanish earth	211.70
Brandy, Spanish	3.99
Olives	20.00
Total	86,713.90

Madrid.

Soap, common	4,343.62
Goatskins	35,713.92
Licorice root	1,778.28
Total	41,835.82

Malaga.

Almonds	13,329.09
Orange peel	328.01
Olive oil	2,107.78
Palm-leaf hats	22,043.37
Pepper, red	502.01
Sundries	538.91
Wine	1,313.76
Total	40,162.93

Palma Majorca.

Confectionery	$47.31

Port Mahon.

(No exports declared.)

Port of Marbella.

Iron ore	8,636.79

Port St. Mary's.

Wine	35,669.95

San Feliu de Guixols.

Corks and cork wood	117,088.16

San Sebastian.

(No exports declared.)

Seville.

Books	151.00
Canary seed	1,704.00
Corks	6,120.00
Cork wood	29,691.00
Earthenware	1,150.00
Licorice:	
Root	3,107.00
Paste	6,738.00
Olives	81,770.00
Wine	2,277.00
Total	132,708.00

Tarragona.

Almonds	13,436.42
Filberts	1,208.72
Tartar	9,383.83
Wine	3,783.14
Total	27,812.11

Torrevieja.

(No exports declared.)

Vigo.

(No exports declared.)

Vivero.

(No exports declared.)

SPANISH WEST INDIES.

CUBA.

Baracoa.

(No exports declared.)

Cienfuegos.

Bones	691.79
Cattle hoofs and horns	73.52
Hides	32,171.29
Copper, old	175.70
Pineapples	210.61
Returned goods	1,666.80
Sugar	1,950,283.27
Tobacco	4,809.29
Cedar and mahogany logs	726.47
Total	1,990,808.74

Guantanamo.

Mahogany	$645.14
Cedar	697.50
Machinery	3,000.00
Total	4,342.64

Habana.

Asphalt	980.44
Cigars, cigarettes, and cut tobacco	565,588.40
Fruits (principally pineapples)	119,283.61
Glycerin	2,014.24
Hides	173,107.75
Metals, old	46,969.54
Palm bark	6,776.91
Parrots	440.45
Sponge	49,100.96
Sugar	886,417.24
Sundries (provisions for Key West, etc.)	9,519.68
Tobacco, leaf	414,797.56
Wax	2,153.14
Wines and liquors	2,898.09
Total	2,280,048.01

Manzanillo.

Beeswax, yellow	258.63
Bones, cattle	344.04
Hides, cattle	3,585.21
Total	4,187.88

Matanzas.

Honey	92.75
Sugar	1,742,591.78
Total	1,742,684.53

San Juan de los Remedios.

Sugar	255,963.01
Hides, raw	3,763.62
Total	259,726.63

Santa Cruz.

(No exports declared.)

Santiago de Cuba.

Cedar wood	3,503.05
Hides	5,343.93
Iron ore	120,579.00
Lancewood	61.62
Manganese ore	1,502.50
Sugar, molasses	3,421.67
Total	134,411.77

Trinidad de Cuba.

Carboys (empty)	11.08
Sugar	235,728.94
Total	235,740.02

PUERTO RICO.

Aguadilla.

Sugar	9,752.02

Arecibo.

Sugar	$86,234.80

Fajardo.

Sugar, muscovado	95,049.38
Tortoise shell	150.54
Total	95,199.92

Guayama.

Bay rum	1,737.61
Gold bar	149.70
Molasses	10,997.56
Sugar	153,134.14
Tamarinds	35.59
Wine, bordeaux	47.90
Total	166,102.50

Mayaguez.

Cocoanuts	2,633.72
Cocoanut oil	40.24
Molasses	18,493.52
Pineapples	344.18
Pineapple slips	88.32
Sugar	127,668.53
Total	149,268.51

Naguabo.

Bay rum	2,980.80
Molasses	43,133.79
Sugar	352,079.02
Total	398,193.61

Ponce.

Bay rum	783.50
Coffee	7,722.05
Molasses	143,367.09
Sugar	157,708.99
Total	309,581.63

San Juan.

Honey	76.19
Returned goods	110.00
Sugar	104,767.82
Wax	35.96
Total	104,989.97

Vieques.

Sugar	65,163.09

STRAITS SETTLEMENTS.

Penang.

Mace	2,089.97
Pickings	2,734.77
Nutmegs	25,373.61
Nutmeg oil	398.35
Pepper:	
Black	31,735.71
White	4,640.30
Tin	290,306.09
Total	357,278.80

Singapore.

Coffee	$149,864.83
Cutch	13,659.15
Cassia	9,109.29
Cloves	4,409.90
Gambier	174,879.94
Gum:	
Copal	63,790.11
Dammar	8,499.64
Gutta-percha	14,958.25
Hides, buffalo	444.41
Mace	353.11
Nutmegs	13,581.67
Pepper:	
Black	67,161.20
White	118.49
Long	818.61
Pineapples, preserved	97.53
Rattans	102,986.71
Rubber	30,363.74
Sago	22,891.68
Shells	2,226.48
Tin	758,816.18
Tapioca	25,828.08
Animals, wild	239.30
Total	1,465,098.30

SWEDEN AND NORWAY.

Arendal.

(No exports declared.)

Bergen.

Anchovies (in barrels and kegs)	329.23
Cheese	419.41
Fish:	
Canned	6,782.10
Dried and salted	217.08
Herrings, salted	13,065.24
Fishskins	4,046.80
Fog horns	1,150.60
Meats, canned	142.04
Oil, cod liver	32,572.48
Sardines and anchovies	488.00
Skins and hides, dry and wet salted	9,569.21
Whisky	589.60
Wood pulp, chemical	18,232.04
Sundries	14.13
Total	87,617.96
Total for March quarter	76,281.29

Christiania.

Books	5,633.39
Brandy	393.90
Feldspar	2,384.54
Fish:	
Mackerel	216.38
Sloherrings	598.06
Matches	2,513.66
Oil, cod liver	12,333.42
Oxalic acid	15,220.58
Oxalate of potash	990.96
Rope, old	2,370.50
Skins and hides	8,588.63
Wood pulp	$10,130.40
Sundries	827.35
Total	62,201.67

Christiansand.

(No exports declared.)

Gothenberg.

Books	2,452.07
Cutlery	1,048.26
Fish (anchovies, etc.)	521.53
Glassware	314.60
Gloves	1,759.96
Hides	9,936.38
Iron:	
Bars	41,566.26
Nail rods	22,063.08
Pig	4,769.18
Wire rods	4,544.67
Liquors	2,027.83
Matches	40,356.95
Steel:	
Bars	2,366.42
Miscellaneous	118.22
Sundries	874.43
Tools	260.97
Wood pulp, chemical	14,763.23
Total	149,744.04

Helsingborg.

Steel and wood work	124.00

Malmo.

Matches	939.23
Machinery	1,302.59
Butter color	358.23
Skins	96.48
Total	2,696.53

Stockholm.

Iron	142,484.67
Steel	117,692.57
Iron-wire rods	26,196.61
Nail rods	41,608.06
Hides	14,705.16
Cement	10,037.64
Miscellaneous	15,183.58
Total	367,908.29

Tromsö.

Cod-liver oil	87.50

SWITZERLAND.

Aarau.

Brushes	915.78
Chemicals	351.45
Elastics	291.47
Knit goods	57,460.48
Scientific instruments	113.35
Silk and half-silk ribbons	3,056.82
Straw goods	49,017.27
Total	111,206.62

Basel.

Aniline colors	$209,517.00
Argols	3,225.00
Cheese	3,278.00
Clothing, knit	17,443.00
Dyestuffs and chemicals	68,259.00
Furniture	1,156.00
Hides, salted	56,170.00
Rags, wool	313.00
Ribbons, silk and mixed	126,208.00.
Silk, spun waste	104,724.00
Wool and hair	2,975.00
Miscellaneous	982.00
Total	594,250.00

Berne.

Cheese	149,374.76
Silk tissues	2,095.74
Straw goods	3,233.14
Sundries	1,180.97
Underwear (silk, wool, and cotton).	27,718.06
Watches and watch materials	14,759.11
Horn ware	420.21
Total	198,781.99

Chaux-de-Fonds.

Absinthe and kirsch	18,648.34
Asphaltum	11,457.00
Chocolate and cocoa	8,118.97
Watches and watch materials	286,922.43
Total	325,146.74

Geneva.

Chemical products	2,491.54
Hardware	123.60
Jewelry	241.25
Musical boxes	761.00
Precious stones, imitation	297.90
Scientific instruments	438.69
Watches and watch materials	37,244.93
Total	41,598.91

Horgen.

Catholic devotional articles	2,938.19
Cheese	2,161.47
Silks in the piece	63,826.13
Half-silks in the piece	143,018.84
Woolen dress goods	17,406.38
Total	229,351.01

Lucerne.

Cheese, Swiss	6,031.80
Condensed milk, Swiss	10,982.18
Spun silk	72,682.40
Wine and spirits	147.26
Total	89,843.64

St. Gall.

Church articles	168.11
Cotton:	
Cloth	30,252.02
Curtains, embroidered	293,520.28
Embroideries	800,316.50
Handkerchiefs, robes, ties, and other fancy embroidered articles.	$329,998.24
Laces, cotton and silk	21,564.09
Embroidering machines	704.78
Ribbons, silk and cotton	608.67
Silk:	
Bolting cloth	14,532.48
Embroideries	6,726.95
Miscellaneous	1,492.63
Total	1,499,884.75

Vevey.

Gold	1,816.61
Hardware	11,175.39
Leather	6,121.78
Music boxes	35,054.81
Personal effects	652.34
Products of milk	17,154.80
Watches and watch materials	6,454.60
Wine	609.44
Total	79,039.77

Winterthur.

Embroideries, cotton	520.10
Gelatin	180.34
Hardware and machinery	157.76
Knit goods	8,964.69
Silk piece goods	1,894.13
Total	11,717.02

Zurich.

Cheese	20,996.86
Cotton:	
Piece goods	3,265.75
Yarns	213.06
Hardware and machinery	9,017.42
Knit goods	4,321.94
Oil chromos	1,068.28
Photographs, colored	1,719.69
Scientific instruments	379.95
Silk:	
Bolting cloth	35,102.16
Spun	3,119.32
Silk and half-silk piece goods	540,648.76
Woolen:	
Piece goods	25,446.81
Yarns	10,477.64
Total	655,777.64

TURKEY IN ASIA.

Aleppo.

Carpets	302.75
Embroidery	1,461.00
Gall	2,700.43
Wool	49,906.00
Total	54,370.18

Alexandretta.

(No exports declared.)

Bagdad.

Intestines	$2,671.27
Licorice root	3,505.48
Total	6,176.75

Beirut.

Bitumen	2,404.34
Salted intestines	2,941.22
Sundry goods and provisions	5,454.96
Tombac	107.75
Wool, unwashed	4,193.89
Total	15,102.16

Damascus.

Oriental goods	4,718.09
Wool	8,678.67
Total	13,396.76

Haifa.

Oil, olive	120.39
Soap, white castile	840.16
Total	960.55

Jerusalem.

Mother-of-pearl (articles of piety)	1,893.73
Olive wood (fancy articles)	278.00
Total	2,171.73

Mersine.

(No exports declared.)

Sivas.

(No exports declared.)

Smyrna.

Almonds, bitter	153.12
Aniseed	733.61
Canary seed	1,091.30
Carpets and rugs	74,519.95
Emery stone	29,144.33
Goatskins	3,768.53
Gum tragacanth	3,445.05
Licorice root	67,361.50
Millet seed	349.41
Olive oil	8,060.39
Opium	108,034.37
Raisins	7,976.14
Soap	1,292.91
Tobacco	4,211.93
Wool	14,844.39
Sundries	19.87
Total	325,006.80

TURKEY IN EUROPE.

Constantinople.

Attar of roses	11,535.76
Pure	1,756.13
Carpets and rugs	390,810.22
Chrome iron ore	36,407.50
Embroideries	18,735.52
Gum tragacanth	$18,596.35
Guts, sheep	7,575.96
Mohair	10,929.92
Opium	33,649.01
Oriental articles and bazaar goods	16,152.30
Roans	7,369.50
Rubber waste	635.30
Scammony	668.27
Seed, canary	18,279.70
Skins, goat	8,346.88
Slippers	812.60
Sundries	1,646.36
Tobacco	1,904.17
Walnuts	245.88
Wool	5,946.09
Yellow berries	594.74
Total	592,598.16

Salonica

Manganese	43,368.00
Skins	23,384.00
Tobacco	7,926.00
Wool	3,654.00
Opium	1,368.00
Total	79,700.00
Total for March quarter	217,474.00

TURKS ISLAND.

Cockburn Harbor.

Salt	27,291.88

Salt Cay.

Salt in bulk	15,852.65

Turks Island.

Salt	12,238.25
Sisal grass	6,396.72
Sponge	323.54
Total	18,958.51

UNITED KINGDOM.

Aberdeen.

Combs	11,403.88
Granite, polished	60,716.46
Herrings	2,722.44
Hides	366.00
Harness composition	597.16
Iron sand	2,547.60
Linens	8,479.92
Paper	33,682.80
Whisky	3,057.84
Woolen goods	12,088.34
Total	135,662.44

Athlone.

Woolens	8,095.67

Ballymena.

Linens	39,637.26
Unions	16,405.72
Cottons	123.56

Whisky	$394.46
Seeds	170.33
Total	56,731.33

Barnsley.

Chemical compounds	112.50
Dead oil in drums	193.60
Enameled plates	325.85
Glue	15,561.52
Laces, leather	1,109.98
Linens	6,728.28
Skins, pickled	53,793.69
Steel wire	135.37
Unions	188.62
Total	78,149.41

Belfast.

Beer	1,522.00
Cottons	310,358.03
Felt	3,435.60
Flax	186,149.29
Ginger ale	61,682.53
Hides	2,879.33
Jute	1,101.67
Linens	2,695,970.48
Paper stock	5,342.20
Seeds	518.33
Silk	298.06
Stationery	4,537.67
Tea	194.04
Threads	19,824.69
Unions	404,206.39
Whisky	14,049.79
Woolens	460.02
Yarn	9,567.35
Sundries	47,078.78
Total	3,769,176.25

Bradford.

Alpaca	32,232.20
Camel's hair:	
Bagging	3,520.52
Tops and noils	70,363.40
Card clothing	32,826.69
Carpets and rugs	31,881.64
Chemicals	1,038.95
Cotton goods	349,193.07
Hair, cow and calf	2,856.49
Grease, etc	11,132.18
Gutta-percha	1,875.96
Haircloth	11,280.89
Household effects	411.66
Iron, steel, etc	15,969.13
Lanterns and slides	265.72
Laps	78,453.76
Leather	18,147.12
Machinery	66,840.09
Miscellaneous	256.22
Mohair goats' hair	123,453.09
Noils	343,978.74
Oil cake	2,394.03
Paintings	957.19
Paper	1,586.64
Reeds and healds	763.67
Shawls, etc	$4,165.68
Shoddy	707.31
Silk:	
Goods	7,110.85
Waste	9,467.35
Skins	1,213.90
Stuff goods	3,234,480.11
Tape, braid	752.13
Tapestry, damasks, etc	391.58
Tops	968,057.32
Waste, worsted	143,404.66
Wines and spirits	379.23
Wool	3,983,782.94
Woolen goods	479,422.65
Worsted coatings	1,732,904.18
Yarns:	
Worsted and mohair	218,904.95
Silk	65,701.90
Other	10,913.21
Total	12,063,439.00

Bristol.

Bath bricks	1,165.68
Chocolate and cocoa	11,433.37
Chemicals	24,618.86
Colors	829.60
Fuller's earth	1,302.97
Glue	4,372.19
Hemp carpet yarn	2,222.38
Iron oxide	2,267.75
Books, old	2,845.91
Skins, pickled	12,163.09
Serges, etc	7,278.69
Tobacco	4,804.50
Wine	682.80
Woolen cloth	16,539.17
Miscellaneous	557.68
Total	93,084.64

Cardiff.

Ammonia	85.52
Coke	1,522.21
Rope	2,894.36
Total	4,502.09

Carlisle.

Cotton:	
Sateens	2,389.51
Twillings	12,159.98
Prints	2,396.28
Stone, building	175.98
Woolen goods	19,581.22
Miscellaneous	180.40
Total	36,883.37

Cork (Queenstown).

Hides	17,060.70
Limestone, wrought	133.82
Marble	121.66
Mackerel	1,235.99
Whisky	774.65
Total	29,326.82

Dublin.

er, etc	$170,070.63
ed goods	119.39
	550.95
;es	214.13
rs	11,797.83
ı and glue	3,454.99
	8,775.76
;	922.64
r	464.10
roasted	656.98
rystal	1,267.56
aneous	756.82
ıl	1,666.97
;	1,323.09
e casings	2,608.60
	9,221.28
and spirits	24,616.22
	270.13
ıs	1,063.86
'otal	239,821.93

Dundee.

ıg	66,470.93
s	2,278,287.57
ing, jute	49,141.76
;	8,966.43
ow	1,783.37
lax (sail)	12,784.64
	39,307.33
glasses	8,137.13
oods	3,734.71
	15,983.53
r	29,655.92
	591,158.17
ıery	1,562.51
	1,540.86
gs	169,648.25
;tock	31,331.46
:s	4,722.33
;es	11,845.67
'	27,522.53
	18,221.01
ıs	2,629.65
	31,029.35
:s	430.97
'otal	3,405,896.08

Dunfermline.

;	36,794.97
	539,601.51
	3,765.13
ıery	364.99
'otal	570,526.60

Falmouth.

ntings, etc	1,946.60
ı goods, knit	111.92
:lay and china stone	60,884.58
'otal	62,943.10

Galashiels.

Woolens	$89,533.87
Tweeds	32,495.02
Fishing rods	388.14
Total	122,417.03

Glasgow.

Books	10,432.94
Cotton:	
In bale	126,839.44
Goods	124,837.75
Carpets, carpeting, and rugs	20,674.89
Chemicals	66,220.10
Dogs	75.00
Fire-clay goods	5,018.67
Fishing gut	8,814.21
Flax	72,727.21
Gum and paints	3,632.63
Hemp and jute goods	671.37
Herrings	15,420.48
Hides and skins	54,810.93
Iron, pig	8,405.58
Lace curtains and nets	7,306.85
Linen goods	7,904.84
Machinery and ironware	21,199.66
Muslins	38,360.81
Paper and paper stock	4,575.16
Printed paper	1,066.62
Potatoes, seeds, and fruits	3,054.13
Provisions	3,939.05
Rags, old and new	24,705.62
Shawls	3,497.98
Silk goods	4,766.54
Stone and stoneware	681.37
Tobacco pipes, clay	13,560.40
Thread	15,600.24
Union goods (cotton and woolen)	50,880.52
Whisky	26,962.83
Wines and liquors	1,255.77
Wire goods	645.00
Wool	63,000.38
Woolen goods	23,336.21
Miscellaneous	20,234.82
Coal tar and coal-tar pitch	9,158.67
Total	864,274.59

Gloucester.

Elastics	4,957.98
Pickles	1,211.75
Roans	5,470.42
Woolens	10,765.42
Sundries	307.43
Total	22,713.00

Greenock.

Sugar	33,735.93
Whisky and gin	646.26
Sheepskins, pickled	24,255.51
Total	58,637.70

Hartlepool.

Chemicals	$2,304.55
Iron sand	753.20
Linen and union goods	2,626.75
Scoria blocks	7,482.24
Sweeping machines	317.29
Channels	164.16
Evaporators	729.99
Propeller shaft	364.99
Total	14,743.17

Huddersfield.

Canvas	10.87
Card clothing	12,240.50
Carpet waste	506.68
Chemicals and dyes	70,259.79
Corduroys and fustians	9,106.96
Cotton cloth	751.41
Cottons, sewing	62,061.95
Cotton velvets and velveteens	1,522.26
Fuller's earth	3,273.13
Grease and oil	595.80
Laps	3,990.59
Linen and cotton	603.53
Linen and linen yarn	1,140.53
Machinery	2,130.78
Mohair and cotton	56,925.84
Mohair, wool, and cotton	16,324.25
Noils	5,418.85
Plate	2.49
Silk and cotton	46.80
Silk yarn	6,287.58
Stationery	111.20
Stuffs	6,143.69
Tea	17.84
Whisky	138.01
Wool	26,915.33
Woolens	449,562.44
Woolen and cotton	83,902.60
Woolen and mohair	2,915.17
Woolen rags	15,509.62
Woolen and silk	159.54
Woolen thread waste	28,212.64
Worsteds	536,619.59
Worsted and cotton	17,695.18
Worsted, cotton, and shoddy	6,663.31
Worsted, cotton, and silk	1,238.10
Worsted and silk	2,228.76
Worsted and woolens	8,108.70
Worsted, woolen, and cotton	376.91
Worsted waste	2,066.74
Worsted yarn	11,525.82
Total	1,453,311.78

Hull.

Bleaching powder	2,737.89
Chrome ore	382.26
Cliff stone	3,594.71
Coal, cannel	1,415.89
Colors	5,178.15
Dog (St. Bernard bitch)	146.00
Essences, flavoring	140.72
Flax	348.11
Hair:	
Camel	$15,462.27
Cattle	6,913.07
Cow	3,054.76
Hide cuttings	956.04
Hides and skins	150,620.25
Iron, pig	2,358.02
Iron plates, enameled	1,242.69
Onions	11,851.09
Paints	1,249.56
Picric acid	1,307.87
Rape-seed oil	1,356.66
Seed	190.27
Sulphate of ammonia	1,945.86
Washing blue	12,489.47
Wool	21,148.62
Total	246,090.23

Kirkcaldy.

Burlaps	4,712.10
Linens	156,769.18
Lithographic sheets	529.01
Linoleum	86,197.02
Whisky	232.87
Miscellaneous	173.19
Total	248,613.37

Leeds.

Chemicals and dyestuffs	7,631.54
Cocoa	2,676.57
Earthenware and bricks	1,774.20
Grease	1,814.50
Hair, wool, etc	94,683.48
Leather, etc	3,948.01
Linens, etc	5,121.71
Metals, machinery, etc	42,894.65
Skins and furs	16,705.13
Sundries	387.11
Waste spun silk yarn	6,873.81
Woolens	167,704.42
Woolens, worsteds, etc	463,546.83
Worsteds	147,752.29
Total	963,514.25

Leith (Edinburgh).

Beer, ale, stout, etc	8,921.12
Biscuits	628.14
Books, printed sheets, etc	3,031.02
Clothing	103.74
Cork wood and corks	4,323.64
Electroplates	634.22
Electrotypes	2,515.73
Fish, cured	3,242.14
Gelatin	67,140.48
Golf goods	2,426.64
Maps and globe covers	899.06
Medicines, drugs, and chemicals	17,173.36
Nets	384.65
Paper	3,402.77
Paper stock, etc	1,549.37
Provisions	51.09
Stereotype plates	739.73
Tea	330.52

Vulcanite and celluloid goods	$1,090.18
Wines and spirits	46,944.43
Wire and rods and wire cloth, etc	18,785.03
Wood pulp	830.23
Wool, waste yarn, and noils	70,749.91
Total	255,897.20

Limerick.

Hides	10,413.82

Liverpool.

Ale, beer, and mineral waters	43,204.78
Animals	2,384.57
Bags and canvas	297,309.06
Black plates and black and iron taggers	1,167.95
Books and stationery	822.43
Chemicals	895,908.04
Coal and coke	37,700.76
Cement	28,678.28
Cotton	953,663.34
Cotton, woolen, and linen goods	28,410.61
China clay	13,159.00
Dye and other woods	60,154.79
Dye and dyeing stuffs	16,974.34
Earthen and glass ware	18,020.64
Fruits (green and dry) and vegetables	243,222.79
Felt	3,698.52
Furniture	131.39
Fish and game	51,745.48
Fruits, preserved	622.90
Grease, oils, and soap	108,727.33
Glue	9,689.19
Hides, skins, and leather	596,413.89
Hemp and flax	11,460.60
Hardware	8,501.77
Iron and manufactures of	61,011.30
Lime and lemon juice	7,499.26
Machinery	355.25
Metals, other than iron or steel	12,857.28
Mill and other stones	2,530.58
Manure	4,764.28
Oilcloth	135,390.89
Paper-making material	79,620.79
Paints	2,321.31
Provisions	21,475.86
Pitch, tar, and creosote	13,543.45
Rubber	894,261.62
Rice and rice flour	67,522.17
Sugar	438,384.04
Spices	42,355.25
Saddlery and harness	5,022.21
Salt	110,483.78
Seeds	12,137.03
Steel and manufactures thereof	18,745.74
Slates, bricks, and tiles	9,796.25
Tin and terne plates and tin taggers	89,840.94
Tea and coffee	5,550.13
Tin	8,277.91
Wool, hair, and noils	1,726,804.51
Woolen rags for remanufacture	23,104.44
Wax	13,509.39
Wines and spirits	4,628.03
Wool waste	$2,082.86
Yellow-metal sheathing	384.45
All other goods	13,718.65
Total	7,259,752.10

London.

Animals	18,417.27
Antimony	15,207.95
Artificial flowers	1,833.75
Bags and bagging	1,361.88
Beer, ale, stout, etc	188,254.75
Blacking	5,067.15
Books	343,057.16
Bristles	31,789.53
Brushes, tooth and hair	13,836.72
Burlaps	62,909.25
Carpets and rugs	197,710.20
Cement	148,049.67
Chalk	17,730.61
China clay, etc	2,443.06
Clocks and watches	10,030.45
Coal and coke	21,437.70
Cocoa and chocolate	72,981.44
Coffee	62,238.83
Colors, paints, and varnishes	193,470.69
Confectionery	656.97
Cotton	13,713.83
Manufactures	15,144.34
Cutlery	401.00
Cycles	5,582.09
Drugs and chemicals	515,555.26
Emery	6,692.40
Feathers	536,372.43
Fish	4,401.79
Floor cloths	6,207.20
Fruits nuts, and vegetables	53,428.53
Fuller's earth	9,118.60
Furniture	51,568.13
Glass, china, and earthen ware	44,067.38
Gloves, hosiery, etc	85,936.11
Glue and gelatin	16,811.34
Grease, etc	10,406.97
Gums	71,987.42
Hair (cattle, etc.)	84,485.42
Hardware	10,286.24
Hats and caps	19,713.39
Hemp, flax, and tow	73,780.72
Indigo	35,515.25
Ivory	52,384.52
Jute	34,921.48
Laces	22,942.34
Leather	138,974.79
Linen	18,282.53
Linseed	22,924.36
Machinery	19,300.98
Matches	3,438 55
Metals.	
Iron and steel and manufactures of	17,579.39
Other	175,089.82
Mustard	78,502.22
Oils	84,620.32
Paper and paper hangings	60,515.19
Paper stock	58,731.86
Perfumery	9,543.88

Pitch and tar	$79,307.93
Precious stones	71,923.50
Preserves, pickles, etc	136,433.36
Provisions, cheese, bacon, etc	23,263.23
Rice	121,431.95
Rope	8,156.44
Rubber:	
Raw	100,649.68
Clothing and manufactures	5,431.70
Saddlery	6,503.95
Salt	7,246.33
Sausage casings	8,031.61
Scientific and optical instruments	19,282.45
Seeds, plants, etc	50,626.87
Shellac	24,621.77
Shells	206,637.18
Silks	56,921.32
Soaps	103,507.83
Skins, hides, furs, etc	1,649,262.83
Spices	192,467.13
Sponge	23,463.71
Stationery	57,609.73
Sticks and canes	2,123.19
Straw plait and braids	87,653.98
Straw manufactures, other	1,908.05
Stuff goods	47,799.96
Stone, marble, granite, etc	771.35
Sugar	231.16
Tea	485,808.88
Tin	409,677.04
Tobacco and cigarettes	38,707.85
Wearing apparel	61,399.90
Wines and spirits	121,199.56
Woods	23,834.29
Wool and camel and goat hair	6,667,234.67
Woolen and worsted goods	882,883.96
Works of art	298,134.62
Yarn	1,580.32
All other articles	323,234.60
Total	16,278,386.98

Lurgan.

Linens	155,799.71
Unions	25,414.44
Cottons	16,125.24
Thread	34,202.67
Fancy boxes	176.40
Total	231,718.46

Manchester.

Buttons	2,221.82
Card clothing	8,817.32
Carpets and rugs	28,293.20
Cattle and other hair	5,736.75
Colors, dyestuffs, and chemicals	221,649.38
Cotton:	
Piece goods	224,179.86
Yarn and thread	176,284.82
Cotton velvet:	
Fustians, etc	1,913,851.61
Skirt bindings	490,426.89
Cotton and worsted and worsted stuffs	88,877.42
Curtains, laces, etc	71,973.12
Damasks, etc	$15,163.55
Elastic web, cord, etc	18,243.49
Felt hats	19,055.88
Handkerchiefs	154,465.18
Hosiery	26,267.62
Iron, steel, etc	21,181.03
Leather and hides	71,627.25
Linens	19,169.56
Machinery	110,856.84
Mahogany and oak logs, etc	7,792.37
Miscellaneous	25,502.49
Paper, paper hangings, etc	37,286.49
Quilts	5,444.28
Rags, paper stock, etc	65,069.13
Shawls, etc	19,172.89
Silk and cotton piece goods	18,822.06
Silk:	
Noils and waste	3,274.95
Seals, plushes, etc	6,633.34
Yarn	21,573.86
Tape, braid, etc	31,476.50
Towels	10,451.77
Waterproof garments and cloth	11,399.89
Wool felt, blanketing, lapping, etc	36,127.80
Wool and wool noils	76,238.67
Yarn:	
Worsted	4,449.18
Other	2,379.92
Total	4,071,438.18

Newcastle-on-Tyne.

Anchor	165.46
Antimony	23,461.40
Bricks, fire	6,837.43
Carbonate of barytes	861.37
Cement	2,189.93
Chemicals	82,496.91
Coal and coke	33,505.85
Composition paint	4,482.05
Iron, pig	14,872.02
Leather, dressed seal skin	4,019.73
Terra alba	394.19
Paints and colors	282.26
Pig lead	3,041.56
Red lead	773.77
Rope, old	4,905.43
Skins, hare and coney	10,399.71
Steel-wire rope	326.06
Grindstones	6,467.58
Cliff stone	330.92
Tar	807.84
White lead	6,929.90
Miscellaneous	437.99
Total	207,989.36

Nottingham.

Boot and shoe laces	2,219.41
Braids	1,103.38
Colors	17,932.80
Cotton	28,193.40
Cricketing goods	323.12
Earthenware	483.42
Elastic	14,303.03

Glue	$3,357.51
Grease	1,261.22
Gripe water	173.48
Haberdashery	5,217.38
Handkerchiefs	6,689.93
Herbal extracts	755.59
Hosiery	196,733.97
Jacquard cards	815.68
Lace	657,163.94
Leather	7,433.12
Linen	31,041.18
Machinery	8,648.15
Muslin	7,278.93
Oxide of iron	2,994.00
Polishing powder	741.64
Silk	60,935.46
Sod oil	342.37
Sheepskins	197,282.46
Salted stock	30,124.48
Terra alba	520.09
Wire goods	1,032.39
Woolens	1,660.30
Miscellaneous	3,109.73
Total	1,289,871.56

Portsmouth.

Antifouling composition	124.40
Marine glue	119.00
Sheepskins, pickled	9,452.65
Sails, yacht	164.90
Total	9,860.95

St. Helen's.

Black plates and black and iron taggers	376.86
Chemicals	296,196.33
Earthen and glass ware	18,980.44
Paints	9,936.61
Steel and manufactures of	3,429.77
All other goods	293.68
Total	329,213.69

Sheffield.

Returned goods	25.00
Anvils	181.46
Cutlery	303,779.91
Edge and other tools	4,420.28
Fiber	268.23
Files	14.98
Ferrochrome	1,281.04
Horn:	
Pieces	1,640.29
Manufactures	2,380.41
Iron	687.40
Laces, leather	4,119.15
Magnets	77.99
Machinery	218.99
Measures	5,940.11
Pearl, manufactures of	7,071.97
Platinum sponge	1,989.35
Raddle	467.26
Sickles and grass hooks	430.58
Steel:	
Wire, sheets, etc	$360,413.19
Boiler tubes	2,348.22
Rails	705.95
Sundries	247.77
Total	698,709.53

Southampton.

Sails and battens	605.83
Flaxen carpet chain	218.57
Woolen yarn	145.55
Whisky, champagne, and sherry	218.57
Total	1,188.52

Sunderland.

Carpets	5,745.18

Swansea.

Black plates	1,778.46
Black taggers	3,192.79
Boiler tubes, steel	4,802.79
Books, biographical	38.93
Bricks	2,545.32
Clay	21.29
Coal	50,422.09
Metallic cobalt	2,931.83
Oxalic acid	12,834.60
Rotten stone	580.15
Tin plates and terne plates	871,852.77
Tin taggers	218.99
Yellow-metal sheathing	5,049.14
Total	956,279.15

Troon.

Canvas	342.71
Carpeting and rugs	13,838.89
Corks	380.31
Curtains:	
Crape, madras, and muslin	1,232.55
Lace	4,326.45
Fishhooks	68.73
Golf utensils	104.13
Grass seeds	175.19
Hogskins, dressed	176.52
Hone stones	1,313.99
Loom cards	311.59
Linen cloth	75.91
Plants	189.56
Scotch bonnets	4,871.00
Tweeds	294.24
Tapestry	1,713.26
Linen thread and twine	572,230.83
Whisky	831.25
Woolen dress goods and worsteds	6,530.16
Total	609,207.27

Tunstall.

China	31,422.50
Colors	1,920.81
Combs	981.82
Earthenware	1,138,112.90

Glass	$2,488.73
Hardware	10,358.34
Ink	549.92
Leather, chamois	124.09
Paper	3,020.88
Potters' materials	8,580.86
Tape	1,619.33
Tailors' trimmings	121.66
Toys	3,536.97
Velveteen	1,221.49
Total	1,204,060.30

Weymouth.

Gloves	6,602.47

URUGUAY.

Montevideo.

Glue stock	6,575.25
Hides, dry	452,647.09
Horsehair	17,737.91
Ostrich feathers	1,625.52
Skins (carpincho, stag, etc.)	3,207.03
Tasajo (dried beef), in transit	11,447.71
Wool	563,267.72
Total	1,056,508.23
Less 2,508 bags of tasajo in transit	11,447.71
Net amount	1,045,060.52

VENEZUELA.

Carupano.

Cocoa	$30,145.08
Hides and skins	1,111.44
Balata	379.23
Total	31,635.75

Coro.

Goatskins	88,002.26

La Guayra.

Coffee	1,995.57
Hides	12,878.12
Cocoa	2,235.22
Sundries	18,530.96
Total	35,639.87

Maracaibo.

Coffee	1,527,157.12
Hides	21,658.82
Skins	4,902.90
Cocoa	1,591.56
Wool	363.42
Lignum-vitæ	30.76
Fish sounds	1,626.13
Balsam, copaiba	630.36
Machinery (returned)	20.00
American gold coin	38,163.73
Total	1,596,144.80

55TH CONGRESS, 1st Session. } HOUSE OF REPRESENTATIVES. { DOC. No. 91, Part 5.

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CONSULAR REPORTS.

DECEMBER, 1897.

COMMERCE, MANUFACTURES, ETC.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1897.

DAILY CONSULAR REPORTS.

Beginning January 1, 1898, the miscellaneous reports of consular and diplomatic officers upon commerce and industries in foreign countries will be printed immediately after their receipt at the Department of State in the form of ADVANCE SHEETS, heretofore issued at intervals as occasion seemed to require. The change to what will practically be the daily publication of these reports, excepting Sundays and legal holidays, has been ordered by the Secretary of State, with the view to the promptest and widest possible distribution of the commercial information obtained by the Department of State for the benefit of the mercantile and manufacturing interests of the United States. The daily edition is intended especially for the use of the newspaper press, which will thus be enabled to obtain the reports in full with the least delay, the boards of trade, chambers of commerce, associations of exporters and manufacturers, and other organized bodies engaged in the development of our foreign commerce, and of individual firms especially interested in obtaining such data without loss of time. The monthly CONSULAR REPORTS, being a reprint of the ADVANCE SHEETS in convenient form for preservation, will be issued as heretofore. Persons applying for CONSULAR REPORTS should state whether the daily or the monthly edition is desired, as duplication will thus be avoided.

The order of the Secretary of State directing the change is as follows:

DEPARTMENT OF STATE,
Washington, December 7, 1897.

The Chief of the Bureau of Foreign Commerce is hereby authorized to print a special edition of consular reports, to be known as ADVANCE SHEETS, CONSULAR REPORTS, to be issued as soon as possible after the receipt of such reports in the Department, for the benefit of trade organizations, business firms, the newspaper press, etc. This edition is to be printed as frequently as practicable in the form of single reports or series of reports to be numbered consecutively.

JOHN SHERMAN,
Secretary of State.

The reasons for the more frequent publication of the CONSULAR REPORTS are explained in a report to the Secretary of State by the

Chief of the Bureau of Foreign Commerce, which is, substantially, as follows:

DEPARTMENT OF STATE,
Washington, December 7, 1897.

Honorable JOHN SHERMAN,
Secretary of State.

SIR: I have the honor to call your attention to the condition and prospects of the work of this Bureau, formerly the Bureau of Statistics, with the view to its further improvement. The chief function of the Bureau is the collection and publication of diplomatic and consular reports relating to the commerce and industries of foreign countries. Since the publication of the monthly periodical, CONSULAR REPORTS, was begun in 1880, the operations of the Bureau have undergone a process of gradual development, until now, the Department of State, notwithstanding inadequate resources for this purpose, has become a great agency for the dissemination, by means of its own publications, the newspaper press, and correspondence with trade organizations and individual firms, of fresh and reliable information from all parts of the world as to commercial movements, industrial activity, development of new fields of enterprise and the practical application of inventions and scientific discoveries to agriculture, mining, and processes of manufacture. Five distinct classes of publications are now issued by the Bureau of Foreign Commerce, viz:

I. COMMERCIAL RELATIONS OF THE UNITED STATES, in two large volumes, being annual reports from consular officers upon trade and commerce, manufacturing and other industries, finance, customs laws, transportation facilities, etc., with special reference to the opportunities for, or obstacles to, the extension of the sales of United States goods abroad. These reports are summarized in an introduction, which is also printed separately in pamphlet form with the title Review of the World's Commerce, for the convenience of those who wish to obtain a comprehensive view of our trade relations with the world at large, rather than to acquaint themselves with facts and figures in detail.

II. CONSULAR REPORTS, issued monthly, and containing, besides the reports of consular officers, either voluntary or in response to instructions from the Department, a great variety of valuable matter from our diplomatic representatives. It is gratifying to be able to state that there has been a noticeable increase in the activity and interest shown by the embassies and legations, as well as by consular officers, in the collection of useful data for this publication, including statistical documents of foreign governments, which are freely availed of. The effort has been made to restrict

the contents of the monthly issue, as nearly as possible, to matter of practical value to our industries and commerce, for the reason that other Departments and Bureaus of the Government are charged with the publication of much of the information which formerly found its way into the pages of what was expressly intended to be a commercial periodical. Duplication of matter in Government publications and consequent waste and confusion are thus avoided. The contents of the monthly reports, nevertheless, still continue to cover a wide range of subjects. They may be said to describe, with more or less fullness, the industrial activity and progress of the world from year to year. But few, if any, inventions or discoveries of practical importance are omitted in the reports from the leading industrial countries, and a number of instances might be cited of new industries established or improvements in manufacturing processes adopted in the United States as the result of suggestions or information supplied in these monthly reports.

III. ADVANCE SHEETS, CONSULAR REPORTS. These are selected reports, of more immediate interest or importance, from the contents of the monthly issue, which are printed in advance for the benefit of the newspaper press, boards of trade, chambers of commerce and other trade or industrial organizations, bureaus of commercial information, and individual merchants and manufacturers throughout the country, especially such as are engaged in foreign trade.

IV. SPECIAL CONSULAR REPORTS, being series of reports on particular subjects, prepared under special instructions from the Department. The titles of some of them—such as Tariffs of Foreign Countries, Port Regulations in Foreign Countries, Canals and Irrigation, and Money and Prices in Foreign Countries—sufficiently indicate their general character.

V. DECLARED EXPORTS. This is a quarterly publication, giving the articles exported to the United States and their invoice values as declared at the various consulates throughout the world.

For some time past, the fact has been fully recognized that the element of timeliness in getting these reports before the public is of great importance. To this end, every effort has been made to secure the utmost promptitude in publication in the order of their relative value, and in spite of the embarrassment caused until quite recently by an insufficient working force and a meager appropriation, a steady and, I trust, substantial improvement has been effected. Complaints of tardy publication, which, under old conditions, was in many cases unavoidable, are no longer received, and within the past two years, commendation of the celerity with which the reports are printed has come from so many quarters that the Department may be considered as responding satisfactorily to the demands upon it for this class of

information, though the capabilities of its service to commerce and manufactures are still but imperfectly developed.

The actual degree of progress attained is best exemplified by the fact that, as long ago as June, 1895, it had excited the attention of the British chambers of commerce, and, during the past year, it has elicited many complimentary expressions from leading financial, commercial, and industrial journals of Great Britain. In all of these comments, the practical value of the reports of United States consular officers and the promptness with which they are printed and distributed are the points especially dwelt upon. In a circular letter to the chambers of commerce of the United Kingdom, June 19, 1895, the executive council of the associated chambers stated that its attention had been directed "to the action taken by the Government of the United States and by other governments by means of special consular reports, in order to supply their traders with information up to date with regard to openings for business in foreign countries," and the opinion was expressed that the practical value of the reports of British consuls "would be much increased if they afforded more direct and early suggestions and details with respect to trade questions of present interest." The local chambers of commerce were, therefore, invited to make suggestions as to trade inquiries by consuls for submission to the Foreign Office. In the responses to this circular, a variety of changes were proposed for the improvement of the commercial work of the British consular service. At the meeting of the Bradford Chamber of Commerce, the statement was made that United States consuls "did a great deal more" for the extension of trade than British consuls did. The Cardiff chamber complained of the delay in printing the British consular reports. The Hull chamber thought the reports of British consuls should be given to the public as promptly as possible, "if necessary, even by telegraph." The Newport chamber replied to the effect that trained business men should be selected as consuls, and that it was desirable that the system of the United States Government in instructing its consular representatives "to report exhaustively upon trade and commerce, either in their isolated or general phases or developments," should be adopted. These responses were submitted to the British Foreign Office, which, on the 7th of August, 1896, answered the various criticisms and recommendations in an elaborate statement, in which it was asserted that the consular reports were issued "with all possible expedition after their receipt," and that the telegraph was invariably used for the transmission of information of immediate importance. Delays were explained by the statement that reports, after having been put into type, were, whenever possible, returned to the consuls with printers' proofs for correction—a practice, it may be remarked, which is

not followed in publishing the United States consular reports, because of the loss of time necessarily involved. Another reason for the belated character of many of the British reports is to be found in the fact that the consuls do not make their reports, as a rule, oftener than once a year, and even then, they wait until "the necessary statistical data are available in foreign countries." United States consuls, on the other hand, report promptly upon any subject they may think timely and valuable to commerce and industries at home. Even in the preparation of their annual reports, they are required to furnish all the information they can collect from reliable sources by a given date without reference to official statistics, if the latter are not then at hand. This difference in methods would alone serve to explain the elements of superiority in the United States system which seem to commend it so strongly to British trade bodies.

[Here follow extracts from leading trade journals of Great Britain, such as the Iron and Coal Trades Review, March, 1897; the London Financial News, April 17, 1897; the British Trade Review, July 1, 1897; the British Trade Journal, June 1, August 1, and October 1, 1897; the Textile Manufacturer, of Bradford, September 15, 1896; the Consular Journal, of London, September 16, 1897, etc., urging greater promptitude in collecting and publishing British consular reports and the adoption of the salient features of the United States system.]

If we take into consideration the fact that it is only within a recent period that our manufacturers have turned their attention seriously to the export trade and that the consular officers have received the stimulus of such activity, supplemented by special instructions from the Department of State, the results which I have endeavored to indicate would seem to be remarkable. They are such as, in my judgment, foreshadow a great future of usefulness for our diplomatic and consular representatives in extending the sales of every class of American goods, as well as of raw products, abroad. The average American is almost sure to have the business instinct well developed, and added to this is a spirit of enterprise and an energy and dash which give him a great advantage in competition with the slower and more cautious traits of the average European. These are the qualities which, in my judgment, have given the consular service of the United States the superiority so freely admitted by the best opinion in Great Britain. What has actually been accomplished, gratifying though it be, seems to me but an indication of what may easily be done. Thus far, this Bureau has had to work under great disadvantages, and I respectfully call attention to the importance of liberal provision for future development in the interests of American commerce, to which our industries must look for the distribution of their

surplus product. The Bureau, even with its present facilities, has reached the point of reducing, as far as possible, the obstacles and delays to prompt distribution of the information which comes, in steadily increasing volume, from all quarters of the globe. This information is given immediately to the newspaper press, which, through the different news agencies and special correspondents, disseminates the information by telegraph and mail all over the country. The reports are printed as promptly as possible in the monthly publication, CONSULAR REPORTS. A great mass of information is sent out from the Bureau of Foreign Commerce by correspondence in answer to inquiries from individuals and business firms. This latter branch of the work has developed so greatly that the Bureau feels the need of a competent staff to classify data and respond to such inquiries with the least delay. A Division of Information is one of the pressing necessities of the work.

For the present, however, I confine myself to a recommendation which will enable the Bureau to still further minimize the delay in printing and circulating the reports. By a simple and inexpensive change in the methods of publication, it will be possible to print the reports day by day as they come into the Department, and issue them promptly for the benefit of the newspaper press and trade bodies, as well as individual manufacturers and merchants, who are constantly writing to the Department for advance copies of particular reports. It has been the practice of the Bureau, for some time, to issue those of the reports which are of more immediate value in the form of ADVANCE SHEETS, for the special benefit of the classes indicated above. It is difficult, however, to determine in advance the extent of the demand for any particular report, and in order that all requests may be complied with without inconvenience or delay, I have the honor to request your approval of the accompanying order, which authorizes this Bureau to print all reports, as they are received, in a special edition to be known as ADVANCE SHEETS, CONSULAR REPORTS. These ADVANCE SHEETS can be numbered consecutively, with titles by subjects, and by means of a card catalogue, it will be possible to respond to a demand for a particular report at any time. The reports, at the end of each month, can easily be collected and classified for printing in the monthly form, as at present. This latter publication would still be useful for reference purposes and for all those who do not attach importance to the early receipt of the data it contains.

The proposed change involves an increased cost of only about twelve hundred dollars per annum, owing to the fact that the additional expense will be merely that of paper and presswork, and, perhaps, additional help in the mailing department. The change, on

the other hand, will insure economy and promptness in answering requests for information and in supplying the newspaper press (a most important agency for the distribution of this information) with the full reports of the consuls at the earliest possible moment, and will encourage consular officers, by the speedy publication of their reports, to put forth their best efforts in this direction. As to the latter result, I may remark that the increase of interest among consular officers in the commercial work of the Department is very perceptible of late, and that the annual reports to be printed in COMMERCIAL RELATIONS, which I hope to have ready by the 1st of January, 1898, promise to be superior to any that have yet been obtained. If the proposed system be adopted, I am satisfied that the Department will have exhausted the possibilities of prompt publication and efficient distribution of commercial reports, and that we need fear no possible rivalry on this point from any of our competitors for foreign trade. If the present work of the consular service in transmitting commercial information by mail could be supplemented by the use of the cable when necessary, in order to advise American manufacturers and merchants of important events in industry and commerce, nothing, it seems to me, would be left to be desired in this branch of the work. It will, of course, be for Congress to determine whether provision shall be made for such extension of the present system, and also for additional facilities which are sorely needed for the development of other features of the work.

Respectfully yours, FREDERIC EMORY,

Chief, Bureau of Foreign Commerce.

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VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to April 1, 1897, have been prepared to assist in computing the proper values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz, (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*.	Gold and silver..	Peso	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil.....	Gold	Milreis	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	.....do	Dollar	1.00	
Chile.....	.....do	Peso	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica.....	.....do	Colon	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	.....do	.92,6	Gold—doubloon ($5.01,7); silver—peso.
Denmark	Gold	Crown	.26,8	Gold—10 and 20 crowns.
Egypt.....	.....do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	.....do	Mark	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark	.23,8	Gold—5, 10, and 20 marks.
Great Britain.....	.....do	Pound sterling...	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver..	Drachma	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	.....do	Gourde	.96,5	Silver—gourde.
Italy.....	.....do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Japan‡.....	Gold	Yen	.99,7	Gold—1, 2, 5, 10, and 20 yen.
Liberia	.....do	Dollar	1.00	
Netherlands§.....	Gold and silver..	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar	1.01,4	Gold—$2 ($2.02,7).
Portugal.....	.....do	Milreis	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖.....	.....do	Ruble	.77,2	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain.....	Gold and silver..	Peseta	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela.....	Gold and silver..	Bolivar.....	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875, the gold standard prevailed in the Argentine Republic.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ended July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

‡ For particulars as to the change from silver to the gold standard, see CONSULAR REPORTS No. 201, p. 259.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

‖ Russia: Gold the nominal standard; silver the actual standard.—*Note by the United States Treasury.* See, also, review of Russian industries and commerce by the Russian Minister of Finance in "Review of the world's commerce," Commercial Relations of the United States for 1895-96, p. 230.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0 41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6	.....	.....
China	Silver	Haikwan tael	1.61	1.61	.....	.....	.....	.....
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	.....	.....
	Silver		.....	.....	.....	.....	.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso	.....	.....	.....	.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	.....	.....	.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

*The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

†The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1894.				1895.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.51,6	$0.46,5	$0.45,7	$0.46,4	$0.45,5	$0.44,1	$0.48,6	$0.48,6
Central America.*	Silver peso	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
China†	Shanghai tael	.76,2	.68,6	.67,6	.68,5	.67,3	.65,2	.71,8	.71,8
	Haikwan tael	.84,9	.76,5	.75,3	.76,3	.74,9	.75,6	.80	.80
	Tientsin tael				.72,7	.71,4	.69,2	.76,1	.76,2
	Chefoo tael				.71,7	.70,4	.68,3	.75,1	.75,2
Colombia	Silver peso	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
Ecuador	do	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
India	Silver rupee	.24,5	.22,1	.21,7	.22	.21,6	.21	.23,1	.23,1
Japan‡	Silver yen	.55,6	.50,1	.49,3	.50	.49,1	.47,6	.52,4	.52,4
Mexico	Silver dollar	.56	.50,5	.49,7	.50,4	.49,5	.47,9	.52,8	.52,8
Persia	Silver kran							.08,9	.09
Peru	Silver sol	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
Russia§	Silver ruble	.41,3	.37,2	.36,6	.37,1	.36,4	.35,3	.38,9	.38,9
Tripoli	Silver mahbub	.46,5	.41,9	.41,3	.41,8	.41,1	.39,8	.43,8	.43,8

Countries.	Monetary unit.	1896.				1897.		
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1
Bolivia	Silver boliviano.	$0.49,1	$0.49,3	$0.49,7	$0.49	$0.47,4	$0.46,8	$0.44,3
Central America*	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,5	.44,3
China†	Amoy tael				79,3	.76,7	.75,7	.71,7
	Canton tael				.79	.76,5	.75,5	.71,5
	Chefoo tael	.75,9	.76,3	.76,9	.75,8	.73,3	.72,4	.68,6
	Chinkiang tael				.77,4	.74,9	.73,9	.70
	Fuchau tael				.73 3	.70,9	.70	.66,3
	Haikwan tael	.80,8	.81,2	.81,9	.80,6	.78	.77	.73,1
	Hankow tael				.74,2	.71,7	.70,8	.67,1
	Ningpo tael				.76,2	.73,7	.72,8	.68,9
	Niuchwang tael				.74,3	.71,9	.71	.67,2
	Shanghai tael	.72,5	.72,9	.73,5	.72,4	.70	.69,1	.65,5
	Swatow tael				.73,2	.70,8	.69,9	.66,2
	Takao tael				.79,8	.77,2	.76,2	.72,2
	Tientsin tael	.76,9	.77,3	.78	.76,8	.74,3	.73,4	.69,5
Colombia	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3
Ecuador	do	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3
India	Silver rupee	.23,3	.23,4	.23,6	.23,3	.22,5	.22,2	.21,1
Japan‡	Silver yen	.52,9	.53,2	.53,2	.52,8	.51,1	.50,5	
Mexico	Silver dollar	.53,3	.53,6	.54	.53,2	.51,5	.50,8	.48,2
Persia	Silver kran	.09	.09,1	.09,2	.09	.08,7	.08,6	.08,2
Peru	Silver sol	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3
Russia§	Silver ruble	.39,3	.39,5	.39,8	.39,2	.37,9	.37,4	
Tripoli	Silver mahbub	.44,3	.44,5	.44,9	.44,2			

*Costa Rica and British Honduras have the gold standard (see table showing countries with fixed currencies).

†China (silver). The haikwan tael is the customs tael. The "British dollar" has the same legal value as the Mexican dollar in Hongkong, the Straits Settlements, and Labuan.

‡Japan has adopted the gold standard (see CONSULAR REPORTS No. 201, p. 259).

§The Treasury Department, in its estimates of foreign values for the quarter ended July 1, 1897, gives Russia the gold standard, and in a footnote says: "Gold is the nominal standard, silver practically the standard." To appreciate the complicated state of Russian currency, see CONSULAR REPORTS No. 188, pp. 34-40, and Special Consular Reports, Money and Prices in Foreign Countries, part 2, pp. 381-400.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Dun	Japan	1 inch.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	4 yards.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Kota	Japan	5.13 bushels.
Korree	Russia	3.5 bushels.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	113⅓ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅞ acres.
Marc	Bolivia	0.507 pound.
Maund	India	82⅔ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	3.6 feet.
Seer	India	1 pound 13 ounces.
Shaku	Japan	10 inches.
Sho	....do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	....do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	....do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	....do	1.22 acres.
Vara	Argentine Republic	34.1208 inches.
Do	Castile	0.914117 yard.
Do	Central America	34.5 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

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DOGS AS DRAFT ANIMALS.*

On March 10, 1897, an instruction was sent to the consuls in Belgium, France, Germany, the Netherlands, and Switzerland, directing them to report upon the use of dogs as draft animals in their respective districts. The following reports are replies to that instruction:

Belgium.—Antwerp, Brussels, and Ghent.

France.—Paris.

Germany.—Berlin, Frankfort, and Hamburg.

Netherlands.—Amsterdam.

Switzerland.—Berne, Horgen, and Lucerne.

BELGIUM.

ANTWERP.

Introductory.—I have been unable to find any official statistics on the subject, except those showing the number of dogs (draft and other kinds) in the cities and towns. There are no "dog farms" in this neighborhood. Men of means do not interest themselves in raising draft dogs as they interest themselves in raising horses, sheep, chickens, etc. The dog business is almost entirely in the hands of the country peasants. The large majority of these peasants are persons who, upon a small piece of ground (almost invariably rented), produce vegetables, fruit, flowers, etc., for sale in the neighboring cities. In addition, they raise a few dogs, rarely more than half a dozen. They bring their produce "to town" in carts drawn by their own dogs, and when there exists a surplus of dogs they are brought to the city on "market days" along with the other things and sold.

* An interesting report on "Dogs as draft animals in Belgium," prepared by Nicholas Smith, consul at Liege in 1893, will be found in CONSULAR REPORTS No. 154 (July, 1893), p. 340.

Breed.—There seems to have been such a long-continued and indiscriminate intermingling of the various breeds that the draft dog now used in Belgium can not, with propriety, be accorded a distinctive name, and must be called, for want of a better name, the "Belgian draft dog."

I can not better illustrate the lack of attention to breed than by narrating an experience which I had a few days ago while riding on my bicycle in the country about 10 miles from Antwerp. Seeing upon the door of a modest one-story brick cottage of a peasant a placard with the words "chiens à vendre" (dogs to sell), I dismounted, knocked at the door, and at once found myself in the presence of the proprietor of the premises. After the greetings, and after informing the gentleman of the purpose of my visit, he gave me the following statement, assisted by periodical questions thrown into the narration by myself:

I have six fine dogs to sell. Three of them have short hair and three are sheared, so as to please everybody. These dogs are just ready for use—strong, healthy, and just a little under 2 years old. I know these dogs well, because I raised them myself. I want 125 francs (about $25) apiece, but I will take less for spot cash. The breed? Oh, mon Dieu, I can't tell you much about the breed; the breed makes no difference. What you want is a strong, well-trained dog, and that's what mine are. However, I may tell you that my six dogs are all from the same father and mother. The father is, if I remember correctly, one-fourth Belgian, two-fourths Danish, and three-fourths Scotch, and the mother is, I think, three-fourths Belgian and one-fourth English.

Assuring the gentleman of my appreciation of his remarkable memory and wonderful mathematical ability, and thanking him, I departed.

Seriously speaking, the story of this polite and humble peasant shows very accurately the attention (or, rather, lack of attention) that is given to the question of breed.

The dog generally in use varies in size and color, but in probably the majority of cases he is, when standing, about 2 feet high, of a dark-gray or dark-brown color, has short hair, and the tail cut. In addition to his work as a draft animal, he is a faithful guardian of his master's home.

Cost.—The price naturally depends upon the size, health, and age. A well-kept dog, 2 years old, 2 feet high, trained and ready for work, will sell for $18 or $20. The same animal at the age of 6 or 7 years, will not bring more than $8 or $10.

Training.—The service of the draft dog is easily taught by the master and easily learned by the animal. It consists merely in hitching the untrained dog to the cart by the side of his more advanced associate, and in a few days he is prepared for the "battle of life."

Strength.—It is difficult to say exactly the weight of the load which can be drawn by one dog, for the reason that he is harnessed alone much less frequently than in company with one, two, three, and sometimes four others. In the latter case, they are harnessed abreast. In the cities and towns, when employed by butchers, bakers, laundries, etc., to draw their delivery carts, one dog is often used, and is harnessed under the cart. The cart is provided with two handles, like those of a wheelbarrow, which are held by a boy, the boy thus guiding the cart through the narrow streets while the dog pulls. In case of need, the boy assists by pushing the cart as he would a wheelbarrow. Sometimes two dogs are placed under the cart, but not more.

The highest utility is attained where two, three, four, or five are harnessed abreast and placed in front of the cart, which they draw just as horses. It is in this way that the peasants come to town with their vegetables and flowers in the morning, and in this way they return in the afternoon, seated in their carts, happy and smiling when they have been able to sell their loads; and in this contentment the dogs seem to join, as they move briskly along, with their steady, easy trot, toward home. A team of three or four of these dogs can draw 500 or 600 pounds for several hours.

The average working life of this faithful animal is said to be about ten years.

Maintenance.—The cost of maintenance is inconsiderable. The dogs live generally on scraps from the kitchen, to which is usually added a little milk, diluted in water. Like most of the peasants themselves, they are not often treated to meat, but I am informed that they are given a good meat dinner two or three times a month. This special dinner consists of horseflesh or beef of the cheapest kind.

Carts and harness.—The carts used in the cities differ from those used by the peasants. The former are usually about 4 feet high, with two wheels, are well constructed, weigh about 250 pounds, cost about $50, and are drawn by one or two dogs, harnessed under the cart, assisted by a boy who guides, and, when necessary, pushes. He never rides in or on the cart. This specimen is provided with a solid iron bar, about 1 inch in diameter, fastened under the rear end of the bottom of the body of the cart and going perpendicularly to the ground. This bar touches the ground when the cart is not in movement and keeps the body of the vehicle at a level while the boy takes out and delivers the merchandise.

The other is the peasant's, or country, cart, and is about 2 or 2½ feet high, usually with four wheels, not so well constructed or finished as the city cart, weighs about 125 pounds, costs from $10 to $20 when new, and is drawn by two, but oftener by three, four, or five dogs harnessed abreast in front of the cart. The wife or

daughter of the owner is usually the conductor of this equipage, and she usually walks into the city by reason of the load, but invariably rides back home when the load is disposed of.

The harness is relatively the same as that used for horses, and costs $1.50 per animal. Country people, however, often make their own harness from scraps of leather, rope, twine, etc., and, in such cases, the cost is practically nothing.

Conclusion.—I should say, in conclusion, that the Belgian draft dog performs all the duties imposed upon him in a most satisfactory and uncomplaining manner. As a factor in the transportation of merchandise, he occupies a most dignified place in this densely populated country.

In the city, he is the trusted and faithful servant of the butcher, the laundryman, the small grocer, the baker, and the shopkeeper, while for the poor peasants, he is literally the one thing indispensable in placing all their produce upon the market place in the early hours of the morning. He does his work faithfully, steadily, and much more cheaply than the horse. It costs nothing to train him, but little to feed him, and but a little more to possess him. For the peasant who raises him there is no cost at all, and, with an expense of $15 for a cart and a few scraps of leather and rope for a harness, the peasant has a team which answers all demands for ten years. He is not more cruelly treated than the horse, and he endures the burdens imposed upon him equally as well. I really believe the dog suffers less than the horse from overloading. When his load is a little beyond his strength, the dog is always assisted, and, in town, the weight drawn by him is constantly being decreased.

HARVEY JOHNSON,
Consul.

ANTWERP, *May 18, 1897.*

REGULATIONS IN THE PROVINCE OF ANTWERP.*

In Antwerp, it is provided that dogs, when used for hauling purposes, must wear a muzzle of metallic wire; they must be hitched to the pole or shafts or under the cart by harness at least 1 meter (39.37 inches) long, and must be attached to one another by chains fastened to hooks on their collars; these chains must be 30 centimeters (12 inches) in length. Dogs may be hitched before handcarts; in case of any other vehicles, they must not be placed more than one head's length in front of the pole or shafts. If the equipage consists of more than three dogs, the driver must lead the dog nearest to passing vehicles. Dog equipages must go at a walk in the street, at near corners, in passing vehicles or mounted horses, and at all places where the road is encumbered. The driver must always be within reach of the equipage, so as to be able to control it Outside of villages the driver may ride, except as hereunder stated, and provided he drives the dogs with leather reins. The driver must keep his dogs as far as possible from the track followed by other vehicles, so

* Translated and transmitted by Consul Morris, of Ghent, under date of June 28, 1897.

as to leave three-fourths of the road free. The wagons must be furnished with a plate, giving the name and address of the owner; this plate must be forward of the wheel on the left side of the wagon. During the night a lighted lantern must be carried on the right forward side. When the fog is dense or the earth is covered with snow, one dog at least must be supplied with a warning bell. The driver can not leave his equipage in the public highway without having first hitched it with a chain. The use of the whiplash is prohibited. It is forbidden to use for draft purposes dogs less than 19½ inches high at the shoulder or dogs which are wounded, sick, infirm, or pregnant. It is likewise forbidden to ride on a wagon drawn by a single dog, to carry on any vehicle drawn by one dog or several dogs a weight exceeding 220 pounds per dog in harness, or to leave harnessed dogs standing unnecessarily exposed to the sun during the heated season.

Infractions of the preceding regulations are punished by a fine of from 19.3 to 96.5 cents or by imprisonment for from one to three days; in case of repeated offense within a year, by a fine of $1.16 to $1.93 or imprisonment from three to eight days. The foregoing punishments may be made cumulative, in the discretion of the judge.

In the province of Brabant, the regulations, while not so explicit, are generally similar to the preceding. The only additions are that vehicles drawn by dogs must be provided with a T-shaped support under one end, so that when at rest the weight of the load shall not fall upon the back of the dog; and, further, that the harness must always be fastened on a collar round the neck.

The regulations of the province of West Flanders are much less detailed. The chief variations to be noted are: In the case of well-trained dogs, the driver may obtain permission from the local authorities not to lead the dogs; it is forbidden to harness dogs with an animal of any other species; it is not permitted to use harness or muzzles harassing in any way the dogs. The dogcart must always give way to other vehicles and bicycles.

The regulations for the province of Limbourg are without any special provisions differing from those prescribed by the other provinces.

BRUSSELS.

Introductory.—Nowhere, excepting, perhaps, with the Esquimaux, is the use of dogs as draft animals so extensively practiced as in Belgium. In Brussels and its suburbs, more than 10,000 are employed as beasts of burden.

Since 1842, the harnessing of dogs has been absolutely prohibited in England. The custom obtains in some parts of Germany and Holland, but is wholly unknown in France and Italy. I am reliably informed that during the past twenty years the use of dogs as draft animals in Belgium has steadily increased, completely superseding the donkey. Previous to this time the dog was only seen hitched to

small, light-running milk carts. At the present time, his use is very general; bakers, butchers, washerwomen—in fact, nearly all trades find him useful in some part of their work. They are hitched single, double, and sometimes three or four to carts weighing from 50 to 150 pounds. When the animal is hitched beneath, the cart is provided with supports attached to the shafts to relieve the dog of the weight of cart and load when standing. The axletree is bowed, so as not to interfere with the action of the dog when in motion. These carts vary in size and construction. The milk carts are usually constructed after the same model, differing only in size. They are neat, but small, box-shaped affairs resting upon two wheels. Much attention is given to the harness, which is heavily studded with brass ornamentation.

Breed.—As far as I am able to learn, there is no special breed of dog used here for draft purposes. All sorts and sizes, according to conditions, are employed. Experiments have been made to produce a large, strong animal by crossing as follows: Mastiff with Danish hound, St. Bernard, shepherd (collie), and setter; St. Bernard with collie and common hound; Danish hound with setter; and Newfoundland with collie. The pure-bred Newfoundland is rarely used here as a draft animal, on account of the height of hind quarters.

A good draft dog usually sells for from 60 to 125 francs ($11.58 to $24.12). But the increase of the number of small carts drawn by dogs has provoked the propagation of a category of dogs which endure the greatest privation, and as his value is insignificant, his life is of small consideration, as he is easily replaced either by a stray dog or homeless cur.

Training.—As scarcely any attention is devoted to breeding, none whatever is given to training the dog as a draft animal. His first initiation into bondage is by being hitched alongside of a dog long in service. If the new recruit is refractory and refuses to pull, he is forced to do so.

Harness.—A special harness, consisting of collar, or breast strap (Dutch collar), traces, saddle, tugs, and girth, is used for dogs hitched in front of carts. For those hitched beneath or at sides of carts, the harness is supposed to consist of breast strap, girth, and traces.

Muzzles.—Muzzles are obligatory at all seasons of the year, as the dogs are nearly always more or less vicious, rendered so by unnatural employment and powerless condition to escape danger when left, as they very frequently are, hitched to the cart and unprotected by the owner. It is not an infrequent occurrence for a cab or beer wagon to collide with the small cart and injure the helpless dog. A regulation imposes that owners of draft dogs shall employ leather muzzles approved by the municipal council, a model of which is

exposed at the central division of police in the Hotel de Ville. This regulation is not always complied with, and much needless suffering is given the poor, dumb creatures by ill-fitting and badly adjusted muzzles.

Conclusion.—The Society for the Prevention of Cruelty to Animals in Belgium is industriously working, not only to ameliorate the condition of the dog as a draft animal, but eventually to succeed in having a law passed prohibiting the harnessing of dogs in any manner whatever.

Attached herewith is the police ordinance relative to harnessing dogs.

GEO. W. ROOSEVELT,
Consul.

BRUSSELS, *March 31, 1897.*

[Translation.]

BRUSSELS POLICE REGULATION FOR HARNESSING DOGS.

ARTICLE 1. Carts having shafts intended for dog traction shall be provided with a support to prevent the weight of the load resting upon the animal. The dogs shall be harnessed by means of traces having a minimum length of 1 meter (39.37 inches), fixed to a collar. They may be harnessed under the same conditions to a pole, in shafts, or under the cart, and attached between them by chains, by means of a swivel fixed to the collar. The length of the chains must be 30 centimeters (12½ inches). Dogs must be hitched before carts, and only the length of the dog's head must extend beyond the pole or shafts.

ART. 2. The carts must be provided with a plate, which must bear in distinct characters the name and address of the owner. This plate shall be affixed to the left side of the cart before the wheel.

ART. 3. Dogs for draft purposes must measure at least 50 centimeters (19.68½ inches) at the shoulder.

ART. 4. It is prohibited—(*a*) to employ as beasts of burden, feeble, sick, vicious, or dogs whose infirmities render them unfit for this use, or dogs with young; (*b*) for any person to ride in a cart when loaded or drawn by one dog; (*c*) to permit more than one person to ride in a cart drawn by several dogs; (*d*) to leave the dogs standing in the sun during hot weather.

ART. 5. Infraction of the present regulation is punishable by fine of from 1 to 5 francs (19.3 to 96.5 cents) or imprisonment from one to three days. In case of second offense, a fine of from 6 to 10 francs ($1.15 to $1.93) or imprisonment from three to eight days. The judge shall impose the above cumulative penalties according to the circumstances.

ART. 6. The local police and the officers of public highways are charged with the execution of the present regulation.

ART. 7. This regulation shall be submitted for the approbation of the King, according to article 86 of the provincial law.

These regulations were approved and signed by the King September 2, 1887.

GHENT.

Introductory.—In this western portion of Belgium, including the two Flanders, the dog has been employed "beyond the memory of man" as a beast of burden. Everywhere in the city and in the country he may be seen employed in what may be generally described as small teaming. He is a characteristic feature of life, and to the Fleming abroad there is always something missing—his familiar servant, the dog. For this existence and employment of the dog there are several good and evident reasons. The dog himself, his strength and endurance, are the principal factors; the conformation of the country in which he lives and works, the limited resources of his master, as well as the economy and facility of his maintenance, are secondary considerations.

The Belgian dog.—There are all kinds and conditions of dogs at service in Belgium; there are large, medium, and small dogs, strong and weak dogs, smooth-coated as well as shaggy dogs. It makes little difference to the Fleming what his dog may be, whether he be fitted for service or not; if the master needs his labor, he harnesses him to a cart and puts him to work. For this single reason, there are very few lazy dogs in this country. There is such a diversity of variety and breed as to be bewildering, when we undertake to describe what dogs are employed as draft animals in this country. There is, however, a type of dog peculiarly fitted for toil which is only found in Belgium and Holland. To this breed, therefore, special attention will be given. All the other kinds which may happen to be pressed into the ranks of the toilers may be properly considered as mongrels or halfbreeds, and without any right to recognition as draft animals.

The Belgian dog, the breed being known only by this name, is a large, compactly built animal. When standing, he measures in height from 20 to 30 inches; the hair is smooth and short, generally tan or dark brown in color. Both his tail and ears are cut short, the former because it is believed that the strength which would otherwise enter into this extremity is retained in the spinal column and haunches, and the latter in order to prevent the constant flapping of the naturally long ears, which would be a great inconvenience and hindrance to their work when annoyed by flies.

Strength.—This specimen of dog has been employed in Flanders for years unnumbered. These dogs are seldom harnessed single, but are usually driven two, three, four, five, or even six abreast. Five or six of such animals can easily draw a load of 600 or 800 pounds for a considerable distance and during several consecutive

hours. The level plains of western Belgium and Holland are especially suitable for the employment of dogs for hauling purposes. While in mountainous regions they are not practicable for heavy loads, still even in slightly rolling country they are able to outdistance horses for long hauls. For example, the distance between Ghent and Brussels is 34 miles; ordinary horses require four hours to cover it, while a team of dogs will easily go over the ground in three hours without any apparent fatigue. A good team of two to four dogs will haul a peddler's load from 5 a. m. to 8 p. m., with only such short intervals of rest as they may obtain during the sale of goods.

The Belgian dog may be put to work when about a year old and can be employed daily during eight or nine years. He generally lives to be 10 or 11 years of age. After death, the skin is still of value for tanning purposes.

Training and cost.—The training of these animals is very simple. It is customary to fasten the young dog, when about 6 months of age, alongside of experienced dogs and without giving him any load to draw, thus to teach him to run in harness. The prices of the dogs vary. Young ordinary dogs sell for about $6 to $7; a good specimen between 1 and 3 years of age brings $10 to $12, while a very fine animal will command $15. The number of dogs employed as draft animals in Belgium is very considerable, but exact statistics on this subject are not obtainable According to the police registers of Ghent, 2,037 dogs are licensed for hauling in this city. These animals are exempt from the $2 tax imposed on pet house dogs, which number 3,775 in this city of 160,000 inhabitants. Notwithstanding the great number of these animals employed, there is an absolute and entire lack of statistics or literature on this subject, so far as I can learn, not a single published book relative thereto existing.

Breed.—Properly speaking, there is no organized trade in these animals anywhere in Belgium; dog markets are held, but the only people who frequent them are small farmers or merchants who may have an extra dog not necessary for their business which they wish to sell. There are no persons who make a specialty of breeding, raising, and selling dogs used for hauling purposes. When anybody has a dog to sell, he generally informs his neighbors, and then, if any of them happen to need such an animal, he bargains directly for it. On this account, the breed is not improving. There are no efforts to this end and in all probability, by the haphazard crossing with other breeds, it is more likely degenerating. A dog seller informs me that in this respect improvement could be made, as, if there were a systematic and scientific crossing of the Belgian dog with the Ulm dog or Great Dane, he believes a very materially better breed would be

obtained. Such efforts, however, have never been made in this country, as the market price of dogs does not justify the expense. It is chiefly because of their cheapness that the Belgian dogs have never attracted much attention or study.

Food and care.—Their food and maintenance are trifling items of expense. One large dog can subsist on the kitchen waste of a household of five or six persons. Properly speaking, daily meat is indispensable, but very few of these Belgian animals get it. They should have daily 1 pound of meat—horse meat will answer; if they receive that much in a week they are lucky. In the country districts, the dog's food is exclusively milk, bread, and vegetables; but still he seems to be healthy and to thrive on it. If specially purchased, the food of five or six dogs will average 6 or 7 cents apiece per day. The care and attention required are slight. At night the dog must be given a good kennel, full of straw, and left unchained. Incidentally, it may also be remarked that, notwithstanding his long day's labor, he is an excellent watchdog. It should be noted that his feet never need attention and that he is likewise proof against all kinds of weather, supporting equally well the extremes of heat and cold. Any casual observer will, upon reflection, be convinced that, in view of his generally hard treatment, the Belgian dog of burden is a patient, long-suffering animal. The French, indeed, well express this condidition of servitude by their proverb, "I would not be a dog in Belgium."

Wagons and harness.—Very little of interest can be said of the wagons and harness employed. Two-wheeled low carts are preferably used. They should be as light as possible and, when loaded, so balanced on the axle as to be almost in a state of equilibrium, thus relieving the back of the dog from all possible weight. Wagons or carts without shafts, for this reason, are the best, as then the dog is free to move around and lie down when halting. The carts in ordinary use weigh 100 to 120 pounds. They cost $8 to $12. The harness is a horse's equipment in miniature. Even when driven several abreast, each dog should have separate harness, as he is then in less restraint. The only peculiarity, if it may be so called, is that the pad or saddle placed on the back is relatively much thicker and stronger than in the harness for a horse. A good dog's harness made of leather costs from $1.25 to $2. There are, indeed, special manufacturers of these articles. The great majority of dog harnesses in use are, however, homemade, of pieces of old leather, rope, or any old stuff which may be at hand, and most rudely put together, costing generally only a few cents.

Conclusion.—In conclusion, it should be noted, as heretofore mentioned, that, owing to an entire absence of any organized trade or

business in the breeding and sale of dogs used for draft purposes, it is practically very difficult to fix or determine with any precision the utility of their service from a statistical standpoint. It may, however, be taken for granted, I think, that their general and common use throughout Belgium tends to prove that, under the conditions existing here, they are a great economy and labor factor. A farmer, peddler, or merchant can buy a very good outfit of three or four Belgian dogs, harness, and wagon for $40. Their subsequent cheap keep and little care, also, are great considerations. Furthermore, one great advantage which dogs have in this country is that they may be housed in very small quarters. In many village households, crowded together as the dwellings generally are in Europe, the dogs may be kept in the courtyard or cellar, while horses would require separate quarters. It must also be considered that pasturage is essential for horses at certain seasons of the year. In these respects, the dog, in the eyes of these people, enjoys great advantages over his equine friend. Whether or not in our country such considerations would be sufficient to give the dog the preference or even place him on an equality with the horse is a question that must be referred by me to higher authority. So far as possible, I have endeavored to describe the Belgian dog as he is found at home employed for draft purposes. Would he be the same dog in foreign hands, can only be determined by trial and experience.

HENRY C. MORRIS,
Consul.

GHENT, *April 23, 1897.*

FRANCE.

PARIS.

I have to report that the use of dogs as draft animals is practically unknown in this consular district. Dogs are sometimes utilized for the propulsion of the small handcarts used by ragpickers, but this use is hardly extensive or important enough to be considered.

SAMUEL E. MORSS,
Consul-General.

PARIS, *April 2, 1897.*

GERMANY.

BERLIN.

Breeding and training.—There may be said to be no breeding and training of dogs used as draft animals in Prussia, and as little harness as possible. It is true that, for the purpose of advertisement in large cities like Berlin, Hamburg, and Dresden, dogs of even size and fairly decent breed are occasionally harnessed to lacquered wagons bearing

the name of some firm, but such are rare. The dog wagon is a familiar sight in the streets of Prussian and Saxon towns and on every highway in Germany, but it is usually a rudely constructed four-wheeled cart made by the village carpenter and smith, and employed to bring milk, vegetables, and other agricultural produce from the country into the town or agricultural implements from the village to the field. The dogs used are of any breed that comes handy to the peasant, usually the short-haired, heavy limbed dog about the size of a foxhound, or else a small specimen of the liver-colored hound, suggestive of the Danish dog. Spotted carriage dogs and others of any distinctive breed or style are very rare, for the simple reason that the people who employ dogs are very poor and would at once sell any dog to the dog fanciers that might show good points. Still, there seems no reason why special kinds should not be bred, whose weight and pulling powers would give them a decided advantage over all other dogs for this purpose.

Last year, at Dresden, there was a special exhibition of dog wagons and dogs, mostly two to a team; but the entries did not present anything remarkable, except in the case of a fancy team of four big mastiffs, which presented a handsome appearance, but could not be considered practical.

Harness.—The harness is a strap harness of the simplest description. It must be remembered that a woman, man, or boy always accompanies the dog or dogs, and generally assists by pulling. Here in Berlin one rarely sees the smart milk carts with high wheels that may be noticed in Belgium and Holland, where the dogs are sometimes harnessed below the wagon and pull strongly in collars like horses.

Laws and regulations.—There are laws regarding the treatment of dogs which are intended to protect them from overwork and cruel treatment. One is a rule that, when in motion, the woman, man, or boy with the wagon must have hold of the tongue or handle of the cart. Another is that persons must not ride on dog wagons. It is doubtful if either one of the rules is of value to the dogs, while it is certain that the owners regard them as oppressive, since they furnish the rural and city police one more excuse for overbearing conduct toward the poor.

The following are the regulations governing the use of dogs. It may be noted that whereas a very large sum is raised from the tax on dogs that do not work for a living, the bona fide working dog is exempt from taxation and thus enjoys a freedom much envied him by his master. In regard to muzzles, they are supposed to be muzzled when at large, even in the country; by special order, they must wear the muzzle when used as draft animals.

SECTION 1. Every dog harnessed before a wagon must carry a safe, properly arranged muzzle, which allows the dog to breathe freely and to cool his tongue, but makes biting impossible.

SEC. 2. Dogs that are unfit for draft purposes on account of sickness, exterior hurts, or on account of their bodily make in general are not permitted to be harnessed to a wagon. This is also not permitted for dogs that are temporarily unfit to pull—for instance, in the case of pregnant or nursing bitches or bitches in heat during the continuance of this condition.

SEC. 3 Dogs which may be considered unfit to pull according to the above signs, either permanently or temporarily, may be immediately removed from the street—that is to say, from the wagon—by the police.

SEC. 4. The weight of the wagon and loading must not be so great that the strength of the dog is overtaxed. The overloading of a dog wagon is punishable and gives the police the right to order the immediate interruption of the drive and to prohibit the continuance of the same until a reasonable reduction of the load shall have taken place.

SEC. 5. A proper vessel must be kept on the wagon from which the dog can drink, and also, during the time from October 1 to April 1, there must be kept for each dog a mat to lie on and a cover to spread over it during halts.

SEC. 6. The cartman of a dog wagon is in no case allowed to sit on the wagon while driving; on the contrary, he must walk beside the dog and lead it by a leash. When on municipal and other much-frequented streets, he must permanently keep hold of the wagon shaft. In case the driver wants to leave the wagon while at a halt, the dog must be loosened and fastened to the wagon in such manner that he can neither get loose from nor move the wagon.

SEC. 7. Dog wagons must give the road to the utmost edge of the way to all other vehicles and horsemen that they meet or that overtake them.

SEC. 8. Wagons harnessed with dogs are not allowed to be hitched to other wagons.

SEC. 9. The use of two-wheeled dog wagons is only allowed under the condition that the dogs are exclusively used for pulling and are not burdened by the weight of the cart on their backs.

SEC. 10. The regulations published in regard to the marking and lighting of wagons, as well as to the driving in ditches and on slopes and embankments of the roads, apply also to dog vehicles.

SEC. 11. Actions contrary to these police regulations will be punished, unless more severe punishments are to be applied according to the general penal code, with a fine of 60 marks.

SEC. 12. This decree takes effect on January 1, 1891.

Latterly, an effort has been made by the local Society for the Prevention of Cruelty to Animals to cause the substitution of donkeys for dogs as draft animals. The movement is commendable so far as supplying poor people with donkeys is concerned, but it is accompanied by the usual exaggerations. The charge that owners of draft dogs abuse them more than they would donkeys can not be held reasonable; on the contrary, the natural lovableness of the dog, his fidelity and intelligence, win for him far more attention and kindness than the more useful draft qualities of horses, oxen, sheep, donkeys, and goats. Statistics that show that draft dogs do not live long prove nothing, because the average life of dogs is low.

There can be no question that dogs which are worked in a reasonable way remain in better health than dogs that have little exercise. Naturally, the poverty, bad food, and bad quarters of the people who use dogs as draft animals make it appear as though work were hurtful to dogs. If the same care were taken to feed, clean, harbor, and work dogs as horses, I have not the slightest doubt that they would live longer and remain in better health than dogs not so employed, with the possible exception of hunting dogs in the hunting season. Their chance of good treatment is always greater than that of other animals, owing to their winning natures.

Conclusion.—The use of dogs as draft animals is probably the oldest in the world, antedating, perhaps, by thousands of years the use of ox, horse, or ass. It is a method that seems fitted for special people and special lands—as, for instance, to note the best known, the polar regions. But there are other places where, among the poor, even donkeys can be profitably replaced by dogs, because the latter are cheaper to feed and useful as watchdogs when not in harness. Such are very sandy regions, where grass and hay are dear, the suburbs of large towns, islands subject to bleak winds, and hilly districts where roads are bad. The chief objection to the ordinary dog as a draft animal is his lack of weight and undeveloped flanks; but if it were once understood that dogs for draft purposes were needed in America, the managers of dog shows could be readily induced to give prizes for dogs with the needed points and training, and it would not be long before a sturdily pulling dog could be bred in any required numbers. The best way to begin would be to set the fashion of dog wagons for the boys and young children of well-to-do people, who could afford to pay for such dogs while they are scarce and consequently dear. The dog is a very willing worker and responds as no other animal, not even the horse, to encouragement by voice and gesture on the part of his master.

CHARLES DE KAY,
Consul-General.

BERLIN, *May 19, 1897.*

FRANKFORT.

For and against draft dogs.—Although the use of dogs for working purposes in this city and district of Frankfort dates from mediæval times, the subject is one concerning which public opinion is still somewhat sharply divided. The Germans are second only to the English in their general love of dogs for their higher attributes—fidelity, purity of breed for the purposes of hunting, watching over property, and as the faithful, devoted companions of humankind. By a large proportion of German people the use of dogs as draft

animals is held to be an unworthy degradation of an animal clearly intended by nature for nobler purposes, and Ludwig Beckman, in his two handsome volumes, Races of Dogs (the standard work of its kind in the German language), makes but one reference to that portion of the subject, which may be quoted as a fit expression of the higher sentiment of German people on the subject:

> The use of dogs as draft animals should, on account of unavoidable abuses, be prohibited by law in all civilized countries, as has long been done in England.

Down to 1866, when Frankfort ceased to be a free city, wagons and carts drawn by dogs were not allowed to enter the city gates, and were, to a much greater degree than now, under the ban of public disapproval. But to a large majority of people here, as elsewhere, life is a struggle which requires the practice of every form of economy, and to the tradesmen and shopkeepers in villages, or even large cities, market gardeners, butchers, milkmen, beer and wine merchants, laundrymen, and peddlers of fruit and other country produce, the dog that watches by night and works by day is a cheap and most efficacious substitute for the horse, or rather for the kind of work usually done in other countries by donkeys, which are practically unknown in Germany.

Regulations —Recognizing this fact, the municipal government adopted, in 1884, and has since carefully enforced, a comprehensive code of regulations for the licensing, annual inspection, and general surveillance of dogs used as draft animals, and under the system thus established the number of dogs so used in this city and district has largely increased, and their general condition and treatment visibly improved.

In accordance with this code, each owner of a working dog is required to present the animal for inspection before the chief veterinary official of the district once each year, at a date specially fixed by announcement for each precinct—usually during the early spring. On such occasions, the owner or a responsible agent must appear in person with dog or dogs, their harness and wagon in perfect order, and drive up and down before the veterinary, who then examines the animal and its certificate of the previous year, and, if all is found satisfactory, a new license is granted, good for one year, unless revoked, in which the age, weight, sex, domicile, etc., of the dog and the maximum load which it is permitted to haul are carefully stated. If a dog is sold, the license must be presented at headquarters and the transfer entered on the record. The certificate must be always carried by the driver when working the dog on the public street or highway, where it may at any moment be called for by a policeman, and, if not forthcoming, the delinquent is subject to a fine; or if the dog is found to be sick, overworked, underfed, or

in any way seriously abused, the license may be canceled and the owner disqualified for the future.

Breeding.—There is in this portion of Germany no race of dogs which, like certain species in Holland and Sweden, are specially bred and used for working purposes. Any large, strong, healthy dog will do, and may be trained to work in harness. Those usually employed for this purpose are not pure-bred animals, but mongrels, either of no definable race or derived from crossings of the Florentine, St. Bernard, and other breeds with the "Deutscher Dogge," a large, short-haired species, which may be called the parent race of working dogs in this country. The dogs in actual use, therefore, vary considerably as to size, and are of all canine colors—black, brown, gray, yellow, brindle, white, and tan—usually short-haired, but sometimes with long, silky coats and showing the markings and general characteristics of the spaniel. There are a few establishments in the country near Frankfort where dogs are bred for hunting, watching, and working purposes, but usually those used as draft animals are reared and trained by the peasants or village tradesmen who afterwards use them.

Training.—Training begins at the age of 1 year, and is a very simple process. The young dog is harnessed up to a cart with an older and well-broken one, and being by nature tractable and obedient, quickly takes to his work. No distinction is made as to sex, except that a slut is exempt by law during the gestative period and may not be worked.

Harness.—The harness is simple and of one prevailing type—a broad strap or breast collar of leather, passing round the breast and tapering backward about 3 feet on each side, thence lengthened by cords, as traces, which are attached to the whiffletree. The collar is held in place by a simple backband and girth; the latter, being unbuckled, permits the harness to be slipped over the dog's head and removed. The leather muzzle which all dogs, in or out of harness, are required to wear at all seasons when outside their owners' premises, serves as bridle and completes the working gear.

Wagons.—Wagons are of two general classes—four-wheeled, which are usually drawn by two dogs and are used almost exclusively in the country or remote villages, and two-wheeled carts, with long shafts or handles, which are held by the driver, who guides and balances the vehicle while the dog, hitched to an iron bracket projecting downward from the floor of the cart, trots beneath. A board, about 2 by 3 feet in size, is required by law to be carried along, and when a stop is made, is laid on the ground for the dog to lie upon. In winter, the same code requires a blanket to be provided to cover the animal when at rest in harness.

Strength.—The load that can be transported by a cart of this kind, guided by a skillful driver and drawn by one healthy, well-trained dog, is somewhat surprising. The license of each animal states the maximum burden that he may draw at from 200 to 300 pounds, but this restriction, especially in the country, where the police are less watchful, is often disregarded, and a load of 500 and even 600 pounds is not unusual, and on the smooth, hard, level roads that are common in this country a dog will usually go as far and work as many hours per day as his master who guides the cart.

The dog likes his work.—From all that can be observed or learned by inquiry, the dogs, at least those used as draft animals in this region, take to their work with entire willingness. Nothing is so irksome to the canine spirit as to be confined in the kennel or left at home when the master goes abroad. Any sign of preparing the cart or wagon for a sortie affects the working dog much as the sight of a gun or shooting costume agitates a setter or foxhound. If left at home while the cart is taken to town by hand, he is apt to howl disconsolately until it returns. Once harnessed, he trots to his place under the wagon, and, when used on a milk route or other uniform service, he learns the way and the place and average duration of each stop as well as his master, in whose absence he guards the wagon and its load with a fierce fidelity which no wheedling can corrupt or fatigue impair. Rarely under ordinary circumstances does a dog have to be urged to greater exertion; if spoken to at all, it is usually to restrain him from drawing the cart faster than the driver cares to walk.

Tax.—The annual tax on working and other dogs in Germany is $3.57, besides which the owner pays 47 cents for the inspection and certificate which are made and issued by the chief veterinary official of the city or district.

Life of a draft dog.—A dog reaches his full strength at about 3 years of age, and thenceforward until his ninth year he should be at his best; but with good care most of them are capable of good service until 14 or 15 years of age, and instances are not rare of dogs 20 or even 25 years old doing their daily task with cheerful alacrity.

Maintenance.—Their best food is meat, but besides this they eat bread, specially prepared biscuits, in which a small proportion of coarse meat is included, and the general refuse of the family table, which, in the case of most peasants, is neither profuse nor specially nourishing. A good, trained dog, 3 to 4 years old, is worth in this neighborhood from $12 to $15; especially large and well-bred ones may bring $20 or even more, particularly when they combine good working qualities with those of a diligent and courageous watchdog,

and of such a one the peasants have a saying that, day or night, his work is never finished. It does not appear that working usually affects the temper of a dog or makes him cross or vicious, except in defense of his own wagon, which he is usually ready to protect from interference at all hazards.

Conclusion.—Putting aside the sentiment which dignifies the dog as a noble animal, worthy of no baser service than hunting or guarding the person and property of his master, it is difficult to see in the working system, as practiced under carefully enforced regulations, as in Germany, any ground for reasonable objection, either by reason of direct ill treatment or the theoretic abuse that is perpetrated when a dumb animal is converted to a use for which it was not intended by nature. That an animal so tractable, faithful, and easily trained as the dog, which, at his best, costs but a comparative trifle, eats the refuse of the peasant's table, and hauls a load of eight or ten times his own weight 20 to 30 miles per day and guards his burden by night, is not well and properly employed in such service, would probably be hard to prove on any but the extreme hypothesis that all work is degrading.

FRANK H. MASON,
Consul-General.

FRANKFORT, *April 6, 1897.*

HAMBURG.

Breed.—In Hamburg and its environs, dogs are very extensively used as draft animals, and, as the authorities have prescribed no restrictive measures against the use of any particular breed or size of dog for this purpose, almost every kind of fair-sized dog is employed. In most cases, however, it will be found that crossbreeds of Ulmer dogs and Danish hounds are selected for drawing all sorts of small wagons and handcarts. The animals are not subjected to any special course of training, but are broken in for their work by their individual owners, according to the latters' own ideas.

Harness.—The harness almost universally used is light and of the simplest kind, consisting either of leather or closely woven jute. A strap or band, which is held in position by a cross strap over the neck and one over the back, passes from the dog's breast to an ordinary pair of traces, which are fastened to a light singletree. This latter is attached by means of a chain to the bottom of the cart or wagon.

Wagons.—The wagons which these dogs are required to haul are of almost as great a variety as are the breeds of dogs; and it is quite wonderful what heavy loads the dogs are able to pull without apparent difficulty.

Objections to draft dogs.—There is very little doubt about the fact that these draft dogs are of great assistance and a source of considerable saving to the small tradespeople, peddlers, costers, etc., whose loaded carts are too heavy for one person to pull or shove alone, and who can not afford to buy and feed a horse. On the other hand, however, the general opinion prevails—and I confess that, after much personal observation, I fully share the same—that the use of dogs as draft animals is a cruelty.

I have noticed that the people become especially attached to their draft dogs, who are their constant companions in business, and that they treat them well as a rule. The dogs themselves are the very hardest workers, and enter into their work with far more spirit and vim than most horses. It is a frequent sight to see their masters obliged to constantly restrain them from pulling. It is sometimes very pitiable, however, to see them pulled out of shape by overwork and overloading. Their crooked legs, nervous temperaments, blurred eyes, and tender feet tell their tale of fidelity and suffering. They ferociously protect the cart and its contents during the absence of their masters, and seem to feel a personal interest in the business.

I took occasion to interview the Hamburg Society for the Prevention of Cruelty to Animals on this subject, and learned that dogs which are used as draft animals are seldom able to stand the work more than five years without their spines becoming affected, and that such draft dogs as are from time to time brought to the dog hospital of the society for treatment are generally beyond recovery. I was also told that the society had repeatedly requested the Hamburg government to forbid the use of dogs as draft animals, and that, although its efforts in this direction had thus far proved absolutely unsuccessful, it intended to continue to use its best efforts to have the practice abolished. Members of the society must bind themselves not to purchase anything from tradespeople who deliver their wares in carts hauled by dogs.

I am advised that in England and Denmark it is absolutely forbidden to use dogs for draft purposes, and that at present there is a strong movement on foot in Berlin to force the people to use donkeys instead of dogs.

Regulations.—Although the authorities here permit dogs to be used as draft animals, they have at least made some regulations for the care and protection of such animals. These will be found in the following police regulations of the city:

It is forbidden to allow dogs to remain alone outside of the house during the night.

The driver of a cart drawn by dogs is not permitted to ride on the cart, and, while the same is in motion, must continuously take hold of the pole.

Dog wagons can not be used for the transportation of adults.

Dogs must not be harnessed to shafts in two-wheeled carts.

Draft dogs must always wear muzzles, such as are prescribed by the police.

From October 1 to March 31 the drivers of dog wagons must carry with them blankets or boards for their dogs to lie on when the cart is not in motion.

Dogs which have been reported to the local police as snappish and liable to bite are required to be kept indoors until the city veterinary surgeon has examined them and pronounced them sound or harmless.

In case of the appearance of hydrophobia, a special imperial law goes into effect, which requires that all dogs must, for at least three months from the appearance of the last case, wear a muzzle and be led by a string or chain.

This law is at present in force in Hamburg and the surrounding country, owing to four or five cases of so-called hydrophobia.

Dog tax.—Believing that it may be of interest, I embrace this opportunity of giving the Hamburg law of July 9, 1894, which deals with the taxation of dogs in the city and state of Hamburg. The tax for dogs is collected for the calendar year, and must be paid in advance each January, against a receipt and the tax check for the current year.

In the district of the city police.

	Marks.
For a dog up to 17¾ inches height of shoulder	20=$4.76
If the same owner has more than one dog, of which neither has more than 17¾ inches height of shoulder, for each dog	30= 7.14
For a dog over 17¾ inches height of shoulder	40= 9.52
If the same owner has more than one dog, of which one or more have more than 17¾ inches height of shoulder, for each dog	50=11.90

In the rest of the state of Hamburg.

For a single dog of one owner	6= 1.43
For every further dog of one owner	12= 2.86
For dogs used in trade as draft animals in the city district	10= 2.38
In other parts of the state	6= 1.43

Dogs must, even when they are not being used as draft animals, be muzzled on the public highways.

The following pay no taxes whatever: Dogs which are kept on seagoing or river craft, as long as they remain on board, and watchdogs, as long as they are kept within private inclosures and do not appear on the public highways.

The liability to taxation begins, for young dogs, three months after birth; for other dogs which have been procured or imported here during the tax year, after eight days. The tax on such dogs must be paid for the current year as soon as the liability to taxation begins. In cases of doubt, it remains for the owner to prove that the dog is not liable to taxation. The tax is not refunded for dogs which have died or have been disposed of or exported in the course of the year. Each dog must carry the valid tax check around his neck in a visible manner.

Dogs which are encountered after January 31 without a valid tax check, shall be caught up. Caught-up dogs, if the proper tax has been paid for them, can, inside of eight days be redeemed, upon payment of the cost of feeding (7 cents per day) and of a fee of 71 cents; if the proper tax has not been paid, upon the payment of a fee of 10 marks ($2.38).

If the dog is not redeemed within the specified time, he is killed.

Tax checks and receipts can not be transferred to another person. The owner, however, if he disposes of his dog, or if his dog has died, is entitled to use them, without further formalities, for a new dog.

For a lost tax check, after the payment of the tax has been ascertained, a new one is issued by the payment of 24 cents.

In the city district, the execution of this law rests with the police; in the country districts, with the heads of the respective parishes. The revenue from the dog tax in the country districts goes to the respective parishes.

The necessary tax checks must be procured from the police, upon payment of their cost.

Violations of the provisions of this law are punishable by a fine up to 50 marks ($11.90), besides the payment of the regular tax. In case of inability to pay, the fine is changed to imprisonment.

W. HENRY ROBERTSON,

HAMBURG, *April 14, 1897.* *Consul.*

NETHERLANDS.

AMSTERDAM.

Use and objections.—Dogs are used extensively as draft animals in this consular district. There is strong opposition on the part of the various societies for the prevention of cruelty to animals to the use of dogs for such a purpose. This opposition was recently manifested by a number of petitions presented by these societies to the provincial states of North Holland, requesting that the use of dogs as draft animals be prohibited. These petitions were, however, rejected by the provincial states on three grounds, viz: (1) Very many people depend for their livelihood on the use of dogs as draft animals, and a prohibition of such use would work a great hardship on the owners and users of the animals; (2) because, as dogs are the chief means by which these owners and users secure their living, it is only natural that they should take good care of them and avoid all cruel treatment; (3) because the laws of the country regarding the ill treatment of dogs are numerous and severe.

In connection herewith, it may be stated that occasions do arise which require the intervention of the Society for the Prevention of Cruelty to Animals.

The General Government prohibits cruelty to dogs and punishes all proved violations of the law; further, it does not go. All other regulations fall within the sphere of the provincial and municipal governments.

Regulations.—According to the laws of the province of North Holland, the use of dogs as draft animals is allowed, but despite this fact, a municipality within the province may prohibit such use. In the city of Amsterdam, dogs can not be used as draft animals

When they reach the city limits, the drivers must detach them and drag or push their carts through the city.

According to article 32 of the regulations of this province, all dogs used as draft animals must be provided with a suitable muzzle of strong wire.

Drivers of dogs must always give the right of way to other vehicles. When a horseman, carriage, or wagon approaches from before or behind, the man in charge of the dog or dogs must drive his cart to the extreme side of the highway, place himself in front of the dog or dogs, and remain there until the other vehicle or vehicles have passed.

Breeding and training.—In this country, little or no attention is paid to the breed of the dog; the strength of the animal is the chief consideration. There is no regular method of training.

Harness and carts.—The harness consists of a leather collar, which is connected to the cart by ropes; no bit is used. One, two, or three dogs are used for one cart; sometimes they are fastened before the cart, but oftener under it. The carts have only two wheels. The Amsterdam Society for the Prevention of Cruelty to Animals informs me that the lack of a regular method of training and the crude method of harnessing the dogs frequently result in abuses, necessitating the society's intervention.

EDWARD DOWNES,

AMSTERDAM, *May 21, 1897.* *Consul.*

SWITZERLAND.

BERNE.

Use limited.—The use of dogs as draft animals is limited, inasmuch as the local authorities in Switzerland can grant or prohibit such use. The use of dogs for draft purposes is prohibited as follows: To pull persons, children under 10 years excepted; hitching by means of the collar; female dogs which are pregnant.

Regulations.—In the canton of Berne their use is permitted, and in the city of Berne the following police regulations exists: (1) Dogs must be at least 65 centimeters high, of strong build, and well fed; (2) they shall be hitched conformably to the purpose, but not in shafts or forks; (3) they shall not be used alone, but only as an aid to pull.

Training.—There is no special training; the dog is simply hitched to the cart until he becomes accustomed to the service, which generally takes very little time.

Harness.—The harness consists of a breast collar, to which the pulling straps are fastened and guarded by another strap around the body.

Carts.—Two and four-wheeled carts, not too heavy, are in use here. Milkmen generally prefer the former and butchers the latter.

Breed.—The dogs used are, with a few exceptions, all bastards of the Bernardine race; the pure breed is not employed as draft animals.

JOHN E. HINNEN,
Vice-Consul.

BERNE, *March 27, 1897.*

HORGEN.

Use of draft dogs.—Dogs are not used as draft animals to any extent in this district, except in the cantons of Schwytz and Zurich. In the former canton, the dog is employed here and there by messengers from village to village and by rag and bone gatherers. It is, however, a small, mountainous canton, offering not much occasion for that sort of canine employment, consequently public attention has not been drawn to the matter there sufficiently to furnish evidence of general facts.

In the canton of Zurich, it is the precinct of the capital that shows the largest use of the dog for that service, viz, two hundred and thirteen, according to the last official counting. They are employed as draft animals mostly by dairymen, green grocers, gardeners, fruit vendors, etc., to carry their products to the city in the morning.

Regulations.—The exceptional large use of dogs for the purpose in this canton has induced its government to draw up a set of regulations, which contain, I believe, nearly everything that may be desirable to know about the subject. The following is a translation:

RULES REGARDING THE USE OF DOGS AS DRAFT ANIMALS IN THE CITY OF ZURICH.

The use of dogs as draft animals is subject to the permission of the local police, given at the production of a certificate from the district veterinary, stating the qualifications of the respective dog for the respective load. The license is valid for one year only; its renewal must then be supported by a new certificate of qualification. Such a paper must contain a detailed description of the animal, the denomination of the wagon type, and the weight of the load. The driver must be ready, at any time, to produce the license upon request of a policeman.

In order to be qualified for the purpose, the animal must be at least 2 years old, have a normal, strong frame, and be well fed. Dogs big with young or giving suck are not qualified.

The weight of a load shall not exceed 240 pounds per dog, inclusive of the wagon. Where the road is ascending or presenting other difficulties, the said maximum load must be reduced or the driver must assist the dog in pulling. Assistance by the driver is presumed for all emergencies.

The harness must be made so as not to aggravate the work of the animal. The use of the "horse collar" is not tolerated; it must be substituted by the so-called "breastplate." The leather straps must be smooth and shall not be narrower than 5 centimeters (2 inches). Harnesses which vary from these prescriptions are confiscated if their make defies correction. To hitch the dog in by the dog collar is not allowed.

The wagon must bear the name and address of its owner. The driver must be over the age of 14 years. The use of the whip or stick is prohibited. The driver may seat himself upon the wagon, if his weight does not increase the load beyond the allowed maximum and if it does not endanger public safety.

Dog teams shall not be left without care on public streets and thoroughfares. In towns, the local police will indicate special stopping places, and may demand that every dog be provided with a muzzle. If a prolonged stop is intended anywhere, the dog must be unharnessed for the time, and in warm weather the team must be placed in the shade. Thirsty or exhausted animals must be watered. In winter, covers and couch mats must be provided.

Besides imposing an adequate fine for nonobservance of these prescriptions, the permission for using a dog as a draft animal may be altogether withdrawn from an obstinate offender.

Harness and wagon.—The dog does not wear any curb or snaffle in the mouth; the guiding strap or line is attached to the collar. The wagon employed is generally a diminutive copy of the common four-wheeled tray wagon.

Breed.—With regard to the animal, I may add that there is, among a great variety of dogs seen here, a number of big, fine dogs of the size of the Bernardiner, the Newfoundland, the wolf hound, and the mastiff. It is a pity that, as a rule, they are mongrels. The short-haired specimens seem to be preferred by drivers.

Watchdogs.—Large-sized dogs have ever been used in this part of the country to protect isolated farms and yards. The abundance of these strong animals, mostly idle during the day, and often seen in the streets without their masters, may have led to the habit here of employing them as draft animals to carry milk and other farm products to town.

Butcher's dog.—The use of the so-called butcher's dog, for driving cattle to the shambles, is abolished by law, since it is termed "cruelty to animals" by the animal protection societies of this country.

WILLIAM STREULI,
Vice-Consul.

HORGEN, *May 10, 1897.*

LUCERNE.

Use.—Dogs are used for draft in this part of the Horgen consular district, principally by the men collecting milk from the small farms for the dairies or for the cheese factories. These dogs do not draw the carts themselves, but are used to assist the men, who are themselves between the shafts, the dogs being harnessed to the carts on the outside of the shafts.

Breed.—The dogs used are of no particular breed, the only requisites being strength and weight. They are probably a cross between the short-haired St. Bernard, the mastiff, and boar hound, the color preferred being red or orange tawny mixed with white.

They are clever and docile with their masters, but rather savage in disposition. They begin to work at about the age of 8 months, and at that age ought to be 56 centimeters (about 22 inches) high at the shoulder. They are strong and enduring, and can pull a load of 300 or 400 pounds and work for seven or eight hours a day.

Value —The values of the dogs range from 70 to 150 francs ($13.51 to $28.95), but a good dog can generally be obtained for 100 francs.

Training.—They do not require any special training. They are simply harnessed to the cart, and in two or three lessons understand what is expected of them.

Harness.—The harness consists of a leather breast strap, the sides of which are supported in a horizontal position by two leather straps passing over the back, and a bellyband starting from between the two back straps. The traces, which are a continuation of the breast strap, are usually made of iron chains fastened to an iron singletree, which is itself hooked on to the cart. The dogs wear a collar with a chain which is fastened to the shaft close to one of the handles, so as to be more under the control of the master. Sometimes two dogs are harnessed to the cart, one on each side of the shafts, but generally one dog is considered sufficient to drag a cart containing two cans, each holding about 50 or 60 gallons of milk.

Cart.—The cart consists of two rather high wheels, between which and at a convenient distance above their naves are two long shafts connected to the axletree by springs and terminating in front by handles, as in a wheelbarrow. From the shafts between the wheels hangs, by chains or iron rods, a platform or tray which is only a few inches from the ground, and on which stand the two milk cans in front and rear of the axletree and maintained in their position by a leather strap passing round them and through staples in the shafts.

ERNEST WILLIAMS,
Consular Agent.

LUCERNE, *May 7, 1897.*

FLOUR IN CHINA AND JAPAN.

The reports following are replies to a Department instruction sent to the consuls at the request of Washburn, Crosby & Co., Minneapolis, Minn., who desired information "regarding the manner of handling flour in China and Japan and the methods used in the manufacture of bread and any other products from flour in those countries."

CHINA.

CHEFOO.

Foreign flour, by treaty, pays no import duty. A third of the flour imported into China goes to Canton. The reports of the imperial customs for the year 1896 give the following statistics relative to Canton:

The consumption of duty-free flour has doubled within five years, the present importation being valued at 1,465,000 haikwan taels* ($1,172,000), against 704,000 taels ($563,200) in 1891, and, as in the case of rice, most of it enters the Kwantung province. The miserable paddy crop in that province had to be made good by over 9,000,000 piculs (1,200,000,000 pounds) of duty-free foreign rice, which passed through Kowloon, and 5,955,000 piculs (794,000,000 pounds) paying duty from the ports on the Yangtze. The estimated value of the Siamese and southern grain consumed was 15,000,000 taels ($12, 000,000), and of the native rice, 10,370,000 taels ($8,296,000), or a total of 25,370,000 taels ($20,296,000). That the province of which Canton is the capital can pay over 25,000,000 taels for food products without any unusual distress or scarcity being heard of speaks marvels for the resources of South China.

In my report from Ningpo, published in CONSULAR REPORTS No. 192 (September, 1896), p. 76, I said:

Flour is rapidly gaining in favor. The market can be extended.

For fuller particulars, see my report on flour in CONSULAR REPORTS No. 165 (June, 1894), p. 301.

The total value in haikwan taels and United States currency of flour imported into Chefoo during 1894, 1895, and 1896 was:

Whence imported.	1894.		1895.		1896.	
	Taels.		*Taels.*		*Taels.*	
Shanghai	7,438	$5,816.52	16,235	$12,598.36	2,847	$2,308.92
Hongkong	2,549	1,993.32	9,816	7,617.22	10,215	8,284.36
Total	9,987	7,809.84	26,051	20,215.58	13,062	10,593.28

The custom-house does not keep a record of the quantity imported.

The commissioner of customs informs me that the average values declared by the importers during April and May of this year were: From Shanghai, 4.13 haikwan taels per picul of 133⅓ pounds; from Hongkong, 5.40 taels per 133⅓ pounds, which, reduced to United States gold, means: Flour imported from Shanghai, $3.18 per 133⅓ pounds, or about 2½ cents per pound, while the same flour imported from Hongkong was valued at $4.16 per 133⅓ pounds, a fraction over 3 cents per pound.

* The consul estimates the tael at 80 cents.

The following gives an idea of the trade in Chefoo:

H. Sietas & Co. (*German*).—Sales per annum, about 1,000 sacks (50,000 pounds), bought in Hongkong; price, $2.50 (Mexican) per sack; none sold to Chinese; used in their own bakery; brands, Star and others.

Gardner & Co. (*British*).—Sales per annum, about 1,000 sacks (50,000 pounds); price, $3 (Mexican) per sack; none sold to Chinese; used in their own bakery and sold to men-of-war; brand, Sperry's Best; imported direct.

James McMullan (*British*).—Sales per annum, about 2,000 sacks (100,000 pounds); price, $2.50 (Mexican) per sack; sold mostly to foreign families and bakers; brands, Sperry and Star.

L. W. Singtai & Co. (*Chinese*).—Sales per annum, 3,000 sacks (150,000 pounds); price, $2.50 (Mexican) per sack; bought in Shanghai and Hongkong; about 100 sacks sold annually to native bakers; brand, Sperry.

Ching-chong (*Chinese*).—Sales per annum, 10,000 sacks (500,000 pounds); imported direct from California by their Shanghai house; price per sack, $3 (Mexican); used in their own bakery and sold largely to men-of-war; sales to Chinese, about 100 sacks per annum; brand, Pioneer.

From the foregoing, it will be seen that the five houses mentioned sell annually 17,000 sacks (850,000 pounds) of flour, all from California; no other is imported.

The Chinese make some wheat flour, which is retailed for from 3 to 4 cents (Mexican) per pound.

The principal food of the natives in this part of China is corn. The only reason I know of why California flour is the only flour sold in China is because the sales of Minnesota flour have not been pushed. In Hongkong, I understand the Sperry people have an agent who uses every legitimate effort to sell. Perhaps if the Minnesota mills made the same efforts, they would have the same success.

JOHN FOWLER,
Consul.

CHEFOO, *July 21, 1897.*

CHUNGKING.

In the province of Szechuen, wheat is generally sown during the twelfth or first moons (corresponding to January and February) and reaped in the third or fourth moons (April and May). There is only one harvest a year, namely, a spring harvest. The farmer then brings it into market for sale. Since there is no likin or tax on this grain, there is no way of finding out the actual quantity produced in this province. It is chiefly locally consumed.

Chungking wheat is sold at about 1,000 cash per 40 catties (66 cents per 53⅓ pounds). There are forty-eight mills in Chungking. Each mill has three large stone presses which are worked day and night by ten horses and eight men, who take turns at working. Before the wheat is put into the press to be ground, it is washed, so as to make the wheat softer. Each mill is supposed to turn out 400 catties (530 pounds) of flour every twenty-four hours. Every 40 catties of wheat put into the mill is ground three times, and produces 25 catties of the first quality, 10 catties of the second quality, and the remainder bran. The first-quality flour sells at 48 cash per catty (2.4 cents per pound) and 30 cash per catty (2 cents per pound) for the second quality.

There is no manufacture of bread. Chinese man t'ou, or dumplings, are made from wheat flour with a combination of impure carbonate of soda, and are about the size of a roll. These are mixed into a dough, sugar or minced meat put inside, and, when they are to be eaten, are steamed over boiling water.

The Department has said that what it desires to learn from this report is whether there is a favorable opening in this consular district for American hard-wheat flours. I send samples of two kinds of wheat grown in this locality. Whether they are hard or soft I am unable to say. As to there being an opening here for American flour, I think it is doubtful—that is, on a scale that would pay. The staple food of the people is rice, and this and wheat are grown in abundance. In famine times, there would, without doubt, be a great demand, but the lack of rapid communication with the coast would prevent any effectual help in the matter of supply.

Wheat can not be laid down here at a figure that the people generally could afford to pay. Were it otherwise, it would be a splendid market for the surplus wheat of the United States.

GEO. F. SMITHERS,

CHUNGKING, *August 4, 1897.* *Consul.*

SHANGHAI.

Since the introduction into China of American flour, it has continued to grow in popularity. The quality and the color both commend it in the markets, and, comparatively, it is easily superior to any flour imported from other lands. There is now being erected at Shanghai a large flour mill, and confidence in its success is evidenced by an advance of $5, within two months, on the shares of $50 each. The mill is located on the banks of the Woosung River, convenient to shipping, and between the mouth of the river and Shanghai.

Although rice is generally regarded by the Chinese as the "staff of life," a large quantity of wheat has been used from the most ancient times, and in the earliest classifications, wheat is mentioned as one of the five grains. In the northern provinces, where rice is not grown and can only be purchased by the well to do, wheat is the most common cereal, but it is of a very poor quality. Blasted heads are seen in large numbers every year and ergotism is a too frequent cause of disease among the poor.

The wheat is ground by a very primitive process. The mill consists of two light stones, which are turned by aid of a blindfolded mule. The flour is coarse and dark, chiefly used in the form of vermicelli, and, when steamed, makes a good substitute for rice, and when mixed with a little broth, flavored with a dash of soy, it forms a very savory dish. To use the Chinese term, they are the "suspended" and the "dropped;" the former is the true vermicelli, the manufacture of which is a common sight in many northern villages, where strings of the paste, fastened at the ends of two light sticks, are suspended before the doors of the cottages even in the main streets. The strings are generally lengthened by pulling down "little by little" the lower stick, a dozen or twenty strings being fastened to each pair of sticks. The chopped vermicelli is made by rolling out the dough and cutting it in thin strips with a knife fastened to the board like a straw chopper.

Wheat flour is also used for making rolls which are lightened with leaven, and these are cooked by steaming, as are the many varieties of patties containing minced meat, molasses, or a kind of jam. The steamer consists of sieves, fitting tightly one upon another, which are covered and placed over the kettle in which the meat or other food is being cooked.

The ordinary Chinese, whether in city or village, takes his breakfast at the tea house or restaurant. It consists almost entirely of these meat rolls or patties; the latter are dipped in vinegar, soy, or a solution of red pepper, when eaten. Sometimes the steamed rolls, after they have grown old, are made palatable by being toasted on a grill over a charcoal fire. Another popular dish is doughnut fried in oil. Baking is almost entirely unknown, but there is a cake of the size and shape of an ox rib which is baked by being stuck on the inside of a jar-shaped furnace, in which there is a hot charcoal fire. These cakes are sometimes circular, but in every case they are covered with the seeds of the sesame, which add very much to the flavor. Another variety is a large, round cake cooked on a griddle, and which is divided into quarters when offered for sale. The Mohammedan Chinese make a similar cake, of which they are also very fond, without using any pork fat.

For the better quality of native pastry and confectionery, rice flour is used, but at the treaty ports and the cities to which foreign influence has extended, many forms of sweet cake and biscuit are made of American flour. Even for purely native varieties of rolls and cakes the American flour is now preferred, on account of its whiteness and wholesomeness.

Within a few years past the importation of American flour has rapidly increased. In this part of China, ten years ago, it was almost unknown away from the treaty ports, but now bags of American flour may be seen in large quantities stacked in the shops of inland cities. Accurate statistics can not be had as to the quantity of American flour imported and the customs returns are silent on the subject, except with reference to two or three of the southern ports. In the last volume of the returns, it appears that Canton takes about one-third of the whole importation of American flour. The figures for Canton in 1896 were 175,684 piculs (1 picul=133⅓ pounds), valued at $439,088 in gold. This would seem to give, for the whole of China, 527,052 piculs, valued at $1,317,264.12.

It will doubtless occur that where so much wheat is grown it is only needed to import mill machinery to manufacture on the spot all the flour that can be demanded, but unless the quality of the wheat produced in China is materially improved, the demand for American flour is likely to go on increasing. The flour from America is shipped almost exclusively in bags holding 25 pounds, a packing much preferred by the Chinese.

In my opinion, there is no reason why a better quality of wheat can not be grown in China. The system of cultivating wheat and cotton is the cause of the inferior quality of the one and grade of the other. Both can be materially improved under the skill of modern husbandry, and wholesome food and proper sanitary laws will enable the vast population of China to show far better results in agricultural skill.

T. R. JERNIGAN,
Consul-General.

SHANGHAI, *August 5, 1897.*

TIENTSIN.

The Chinese so-called bread is a steamed product, somewhat in the nature of a dumpling, which is not unpalatable to the foreigner when sliced and toasted. The Chinese also make small cakes, pastry, biscuits, and a kind of doughnut, which last-mentioned article, however, foreigners never touch.

I have made direct inquiries among merchants and also at the offices of the imperial maritime customs regarding the importation of American flour into Tientsin, and I find that the importation here

is restricted solely to the needs of foreign residents, and that the standard of living among the Chinese is so low and labor so cheap that there is no opportunity to extend the importation of our flour for their uses.

The general excellence of American flour is well understood by merchants here, and we already control the Tientsin demand for flour consumed by foreigners.

Flour from California and Oregon is retailed here at $3 (Mexican) for a bag of 50 pounds, or 6 cents (Mexican) per pound. The best Chinese flour is retailed at 35 cash per catty (2.8 cents, Mexican, per pound).

The native flour manufacturers of Tientsin use Shantung wheat, which is better and more easily procured than that grown west of here. Shantung wheat is, according to our standard, of inferior quality and only medium hard, and is worth to-day in Tientsin 35 cents in gold (70 cents, Mexican) per bushel.

Under these conditions it is obviously unnecessary to go into details as to facilities for shipping and for monetary exchange between Tientsin and the United States, beyond stating that importations from the United States for the territory of which Tientsin is the distributing center are transshipped generally at Shanghai, and not infrequently at Yokohama, and that there are absolutely no difficulties in the way of financing shipments.

In concluding, I would say that the prospects for doing a business in American hard-wheat flours in these northern provinces, beyond supplying the needs of foreigners—who are, of course, few in number—are remote and dependent upon conditions which, at the present rate of social evolution in China, there is little hope of bettering in the immediate future.

SHERIDAN P. READ,
Consul.

TIENTSIN, *June 24, 1897.*

JAPAN.

KANAGAWA.

The Japanese have not been consumers of bread, but have used flour in the manufacture of confections, of which great quantities are sold and used, not only as accessories (as with us), but as staple articles of diet. For years rice flour has been used in the preparation of these confections, but they are beginning to use wheat flour, both for this purpose and, to a limited extent, in making biscuits. Almost all of the wheat flour imported into Japan comes from the United States and the import is now increasing, as is shown by the following table, taken from the official customs returns of the Empire

for 1894, 1895, and 1896, compared with the table accompanying my report for the years 1890–1893, dated April 30, 1894:

Quantity and value of imports of wheat flour into Japan during the years 1890–1893.

Year.	From the United States.		From other countries.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Pounds.		*Pounds.*		*Pounds.*	
1890	8,888,032	$179,148	56,940	$2,225	8,944,972	$181,373
1891	11,952,270	270,655	113,602	3,348	12,065,872	274,003
1892	10,025,250	191,902	8,918	6,000	10,034,168	197,902
1893	11,862,682	199,067	158,875	4,197	12,021,557	203,264

Imports into Japan of wheat flour from the United States for the years 1894–1896.

Year.	Quantity.	Value.
	Pounds.	
1894	19,753,041	$302,049.16
1895	13,866,971	205,422.29
1896	31,408,314	519,508.09

The first annual returns (1896) for the ports of Formosa (now a part of the Japanese Empire) show that the import of wheat flour from the United States was 6,900,330 pounds, valued at 218,898.76 yen ($116,016.34).

A portion of the increase in the import for the year 1896 may be accounted for by the fact that it has been discovered that a steady rice diet encourages the tendency to a disease known as "kakke," or beriberi. If wheat is used occasionally, this tendency is greatly reduced or removed, and the authorities have required the occasional use of wheat flour in the army and navy.

Almost all of the flour imported is the soft-wheat flour of Washington and Oregon. The importing merchants inform me that they have made more than one effort to introduce the hard-wheat flour, but without success. The Japanese, accustomed as they are to the white flour made from rice, object to the dark color of the hard-wheat flour. I understand that objection has also been made that this flour is more gritty than that made from soft wheat.

In the past, the import of flour has been made almost entirely by the large foreign firms at the open ports of the Empire, but the Japanese are now evincing a desire to engage in direct trade, and three or four of their larger houses in Tokyo and Yokohama are now, I believe, importing flour.

N. W. McIvor,
Consul-General.

Kanagawa, *June 25, 1897.*

OSAKA AND HIOGO.

There is a steady market here for American flour, and, in my opinion, the demand is on the increase. In 1895, the statistics of the imperial customs here show the imports to have been 581,789 catties (775,718 pounds), valued at 29,894.31 silver yen ($14,947.16); in 1896, 2,437,541 catties (3,250,055 pounds), valued at 129,447.50 silver yen ($68,736.62), showing the increase for 1896 to have been 1,855,752 catties (2,474,337 pounds), valued at 99,553.19 silver yen ($53,789.46). This increase I believe to be due to the increased transportation facilities and lower freights from the Pacific Coast.

The equivalents of the Japanese yen in United States gold have been computed at 50 cents for 1895 and at 53.1 cents for 1896.

The American flour imported here comes principally from San Francisco, Cal., Pendleton and Portland, Oregon, and Spokane and Tacoma, Wash.

The demand for flour here is chiefly confined to the lower grades, not only because the use of flour is making the greatest strides among the poorer classes of the country, with whom cheapness is the greatest desideratum, but because a large quantity is used for making paste in the enormous paper industries, such as the manufacture of screens, fans, kites, and numerous other articles for which a good and cheap quality of paste is necessary.

The higher grades of American flour are chiefly sold to the naval vessels and foreign bakers, who supply the local market with bread and cakes.

The uses of flour have become more general among the Japanese during the past few years.

The difference between the average price of American flour and Japanese flour is about 1 cent on the pound. This information I have procured through the local government from the several provinces within this consular district.

There are two classes of Japanese flour, one manufactured from wheat and the other from rice, the latter being much smaller in quantity than the former. Japanese flour is principally used for making vermicelli, macaroni, and cakes.

The method employed by the Japanese for the manufacture of flour is primitive, compared with that in the United States. The rice or wheat, being cleaned, is then ground to a powder, or proper consistency, by means of a stone mortar, run usually by water power, which is one of nature's greatest gifts to this country. There are no flour mills of foreign construction within the limits of this consular district.

In view of the small quantity of freight offered for the outward passages of vessels from San Francisco to Hiogo (Kobé), special low rates have been made on flour, owing to its use as ballast or stiffening, instead of rock ballast.

The principal importers of American flour here are Messrs. Frazar & Co. and Dodwell, Carlill & Co., both being agents of steamers and receive commission on their cargo, which enables them to lay flour down here at a lower figure than one engaged in other pursuits.

The question of difference between hard-wheat flours and soft-wheat flours is unknown here, and therefore cuts no figure in the flour trade.

As to whether there is a favorable opening in this consular district for hard-wheat flours, it is simply a question of price and push. The long rail from Minnesota, or as far west as Great Falls, Mont., to the Pacific Coast shipping points is the problem to be solved, and as, according to the United States interstate commerce bill, a railway can not charge less for a long than a short haul, and wheat can be produced in Washington at as low a cost as in the middle West, Washington flour dominates this market.

HUNTER SHARP,
Vice-Consul, in charge.

OSAKA AND HIOGO, *August 27, 1897.*

CHILEAN VERSUS AMERICAN FLOUR IN ANTOFAGASTA.

The province of Antofagasta, Chile, is a desert, and its products are entirely mineral. Everything needed for man and beast is imported from abroad.

During 1896, and without much alteration up to the present, the price of flour has averaged $6 in Chilean currency, or, at the ruling rate of sterling exchange during this time of 17½d. per Chilean dollar, to $2.13 in United States gold per Spanish quintal of 46 kilograms (101.4 pounds).

The south of Chile not only supplies this province, but also a considerable part of Bolivia, served by the Antofagasta and Bolivia Railway, extending from this port to Oruro, Bolivia, 600 miles distant, on the great Andean plateau, 12,000 feet above tide water.

During the civil war of 1891 supplies could not be sent from the south, and several cargoes of provisions were shipped with profit from San Francisco. The flour was much liked and was thought to be superior to Chile flour, but since then no importations of foreign flour have been possible, nor does there seem any immediate prospect for such shipments from abroad.

C. C. GREENE,
Vice-Consul.

ANTOFAGASTA, *June 6, 1897.*

PUBLIC WORKS IN LYONS.*

At the moment, there is no actual construction of railways going on in Lyons, but there are a number of projected changes in the water and tramway systems of the city and vicinity, which will be made with little delay, and several new works in the suburbs, which will be shortly commenced. Among them may be cited:

RAILWAYS AND TRAMWAYS.

(1) The change of the present city lines of tramways (covering more than 40 kilometers) from animal to electric traction by either the storage or trolley system. This will necessitate the substitution of better cars than the heavy, double-decked vehicles now in general use.

(2) The construction of the railway system called De la Rive gauche du Rhone (the left bank of the Rhone), which covers the third and sixth arrondissements, known, respectively, as the Guillotiere (third) and the Brotteaux (sixth). The former is an old section of the city, and the latter, which lies north and adjoining the former, is of quite recent date and occupies a section of reclaimed territory which, before the river levees were constructed (1850), after the notable inundation of the preceding year, formed an extensive morass, susceptible to all the changes of the rapid and erratic Rhone. This quarter is now quite a fashionable residential section of the city.

(3) The construction of an electric line of railway from the Croix-Rousse to Ste. Blandine, a distance of about 5 miles. The Croix-Rousse is that section of the city situated on the bluff at the head of the neck of land that separates the Rhone and the Saône and about 3½ miles from their confluence. It is a very thickly settled section, and is called the home of the weavers, most every tenement having one or more looms on every floor. Ste. Blandine is a quarter of the city near the depot of Perrache, the principal railway station of the city, and the projected line is intended to connect the two points.

(4) The transformation of the present line from Lyon-St. Just to Vaugeneray, about 9 miles from the city, from steam to electricity.

(5) The construction of an electric road from Vaugeneray to Ste. Symphorien-sur-Coise, about 20 miles. This is to be a continuation of the last-named line.

* This report was directed to be made at the request of the United States Export Association, of New York, to which a copy has been mailed.

(6) The construction of an electric railway from Lyon-St. Just to Francheville-le-haut, a distance of about 4 miles southwest from the city.

(7) The extension of the present line of steam road from the Place des Cordeliers to Monplaisir-la-plainde. This line is of the storage steam-dummy system, and, starting from a point in the heart of the city at the Place des Cordeliers, runs out into the eastern district about 8 kilometers (4.97 miles).

(8) The construction of an electric tramway from the Chazelles-sur-Lyon depot to St. Symphorien-sur-Coise, about 45 miles from Lyons.

(9) The construction of an electric tramway from Lyons to Chaponost southwest about 7 miles.

(10) The construction of a steam railroad from Annecy, in Haute Savoie, to Thomes, a distance of about 12 miles.

(11) The changing of that part of the Lyons-Geneva railway line that lies in the city limits. This is not definitely fixed, but it is understood that the change will not take it far from the present located line.

CITY WATERWORKS.

The city is about to commence the construction of a new power house for the increasing demands of that part of the water system in the third and sixth arrondissements—that is to say, the Brotteaux and the Guillotiere districts, which have already been described.

CANAL DE JONAGE AND ELECTRIC POWER.

Among the other enterprises now under way and rapidly approaching completion, and one that will go far toward pulling this rather sleepy city out of its lethargy, may be mentioned the installation of a system for the distribution of electric power and light by utilizing the splendid force of the River Rhone. A grand canal has been dug and nearly completed, called the Canal de Jonage, operated by the Société Lyonnaise des Forces du Rhone, from a point near to and opposite the village of Jons, about 19 kilometers (11.8 miles) from the city (easterly), where the Rhone takes a sensible curve and is quite rapid, to Cusset, following nearly the course of the river. At Cusset it turns northerly and will return its waters to the river bed nearly opposite the Iles de Rillieux, a few kilometers above the city. The extreme length of the canal will be 18.6 kilometers (11.5 miles); its width varies from 60 to 105 meters (197 to 413 feet) and it has a minimum depth of 2.5 meters (9.8 feet). It will be navigable, and will, in addition to its power of force, be capable of irrigating upwards of 15,000 acres. The company was granted its rights and franchises by a law passed July 9, 1892, which declared it a work of

public utility, one destined to serve particular interests and not common or natural—that is to say, it serves a collective analogous interest to irrigation enterprises, for the realization of which legislation accords the right of expropriation. The charter of the company extends for ninety-nine years. Its capital is 16,000,000 francs ($3,088,000) of stock and 8,000,000 francs ($1,544,000) of bonds. The volume of water conceded is 100 cubic meters (3,350 cubic feet) per second, in ordinary times, and 150 cubic meters (5,295 cubic feet) when the supply of the Rhone would be superior to 600 cubic meters (21,180 cubic feet), which is frequently the case. The power generated should be about equal to 20,000 effective steam horsepower, distributed between Lyons and Villeurbanne in fractions which could be made to fall far below 1 horsepower. One of its most interesting applications of the force would be the loom (weaving) power in the houses along its route, and it is hoped that the force can be furnished the weavers at a very low price, permitting them to compete with the large factories situated in that suburb of the city.

Following the schedule of annual prices fixed by the company's charter for located horsepower working during the day of twelve hours, it would show 720 francs ($140) for each horsepower and 250 francs ($48) for those of 50 and above. Below 1 horsepower, the power would be sold by tenths, and between 1 and 50 horsepower according to schedule—that is to say, for a motor of 2 horsepower, 695 francs per horsepower; 3 horsepower, 670 francs per horsepower; 4 horsepower, 645 francs per horsepower; 5 horsepower, 620 francs per horsepower; 10 horsepower, 510 francs per horsepower; 20 horsepower, 360 francs per horsepower. Recent estimates have shown, however, that these prices can be greatly reduced.

In comparing these prices or rates with the prices of the power now furnished by small gas and steam engines, which is stated to be as 25 to 1, an idea can be formed of the economy which will be realized when such motors are replaced by electric ones. From the official statistics of the service des mines, over 13,000 steam horsepower is now employed in Lyons, out of which not less than 8,000 are motors under 10 horsepower. Now, the division of these motors into one-tenth of a horsepower and their house-to-house distribution will determine, without doubt, the transformation of certain industries which never had recourse until now to anything but manual labor by reason of the impossibility to employ any other motive power.

The canal is an exceptionally fine piece of work in its entirety, everything being of first-class material, workmanship, and finish. It will be completed and in operation the present year, when the fruition of the hopes of its promoters may be realized and the city

made sensible of a great adjunct to its prosperity. Like all great enterprises fostered by private capital, it has been made to feel the adverse influence of its enemies and the incredulous and has had its ups and downs; but, backed by brains and muscle, it has happily surmounted all within a short three years, and last month witnessed the laying of its first distributing cable along the quays of the city.

It may be interesting to remark that the gas company here has held concessions for years which prohibited any one from furnishing or distributing light or power. Its rights and franchises were so exclusive that the streets were (for those purposes) put under their absolute control, making it impossible for any rival company to cross a main or service pipe of the favored company. In consequence of this, among other things, Lyons—the second city of France, having a population of 500,000 souls given to industrial pursuits—has been forced to keep out of the march of modern improvement and submit to ancient methods the most detrimental to her interests and pursuits.

A few large hotels and business houses have private electric plants for lighting, but they are all confined to their several locations and in no case permitted to cross any street or way wherein is laid a company pipe. This monopoly franchise of the gas company expires by limitation some time in the year 1904. A prolongation of its charter for twenty-five years was asked for and has been granted by the municipal council on condition only that the monopoly for lighting should be surrendered; and right here the motive force of the Rhone, controlled by the grand canal, will be able to show its magnificent powers, and electricity instead of gas will henceforth light up the city. It is estimated that 24,000,000 francs ($4,632,000) will be necessary to fully complete the work.

A provisionary installation of 600 horsepower has been in operation for over three months, all of which has been contracted for and many large contracts are about being signed, so that, immediately on inauguration, returns seem to be assured to the company, and as the concession of its rights are for a century, the enterprise seems flattering. I am informed that if only one-half of the 20,000 developed horsepower should be placed at an average price of 400 francs per unit, it will amount to more than double the sum necessary to pay all general expenses and the interest of 5 per cent on both the stock and bonded debt Pending the construction of the works, the shares (500 francs) of the company have fluctuated between 100 and 150 francs premium and its promoters believe that in time they will be worth 1,000 to 2,000 francs.

THOS. N. BROWNE,
Vice-Consul.

LYONS, *August 9, 1897.*

AUTOMOBILES IN FRANCE.*

I think it right to call the attention of some of our enterprising manufacturers to the great strides being made in France by builders of automobiles. Not a month passes without some new company starting up, and the variety of systems offered to the public is almost beyond the limits of nomenclature. Naturally, the reason of this keen competition on the part of the different firms is the constant demand of the public to possess this new mode of locomotion, and that in spite of the costliness of the vehicles. The French proverb, which says that "the appetite comes by eating," might fitly apply to the present state of public sentiment on the subject.

It is now many years ago, shortly after the Franco-Prussian war, that MM. Dion and Bouton, who built engines more or less ingeniously devised to draw carriages, endeavored to demonstrate the possibility of using steam carriages on the roads. But these motors were independent of the vehicles. Although this small beginning was continued and somewhat improved on by others, the public did not take to them; they looked clumsy, gave out a certain amount of smoke, and were generally considered as a ridiculous mode of conveyance. But the idea was not to be abandoned; the inventive spirit was aroused and the final result was certain to be successful. The point in consideration was not only to have the motor apparatus form a part of the carriage itself and of the smallest compass possible, but also to find a substitute for steam. Gas was tried, but was proved inapplicable and expensive; electricity, which, I doubt not, will in the near future supplant every other motive power, was not sufficiently practicable. The choice fell on petroleum, which, up to the present, seems to fully answer the expectations both of the motor-carriage builders and the public. At first, however, the smell of the oil was very disagreeable, especially to those who followed in the wake of this fin de siècle carriage, but this inconvenience has been almost totally suppressed by most builders, and satisfaction is general.

The petroleum motor is a kind of gas motor furnished with an apparatus for mixing immediately hydrocarburet with air; this apparatus is called a "carburetur." The first patent for petroleum vehicles was taken out in January, 1884, by Gottlieb Daimler, a German engineer. A year later he considerably improved his system, and almost immediately several great automobile constructors abroad adopted

* For previously published reports upon this subject, "Horseless carriages," see CONSULAR REPORTS Nos. 180 and 182, pp. 25 and 265, respectively, for France; No. 198, p. 202, for England; and No. 190, p. 552, for Europe.

it, and, among others in France, MM. Lavassor, Peugeot, and Rossol de Lille. The superiority of petroleum motors over steam was fully demonstrated in 1894, in the competition organized by that enterprising paper, Le Petit Journal. Out of twenty-one motor carriages which ran between Paris and Rouen, fourteen were petroleum and seven steam. All the former accomplished the journey without difficulty, while only three of the latter were able to arrive at the destination. Last year a similar experiment was made between Paris and Marseilles, and out of the thirty-six vehicles that ran only three were moved by steam; consequently, it may be affirmed that petroleum has entirely superseded steam for motor carriages.

Until quite recently, automobiles were only regarded as objects of luxury; but their practicability was so apparent and impressed the public mind so favorably that several commercial houses have adopted them for the transport of their goods, while a large cab company in Paris is running about five hundred of them for public fares.

All this is to prove the great and increasing interest taken in this new means of locomotion. However, there are one or two factors which will assist us to understand why automobiles can be adopted with facility in Europe and why the idea has readily been seized upon by the people of this country.

It is well known that France possesses the best road system in the world. The highways are, indeed, admirably kept and are as smooth as billiard tables; I mean the national modern routes. Before the Second Empire, the roads ran over hill and dale, irrespective of all obstacles, but under Napoleon III, who did so much for the improvement of communication, the engineers adopted the better plan of following the course of the streams, so that the roads are almost absolutely level and therefore admirably suited for automobiles. Another factor, which has its importance in the subject under consideration, is that there is no restrictive legislation on this new method of traveling. The automobile carriages are regulated by the same laws that appertain to every other vehicle. So long as one keeps to the right side of the road, does not run at breakneck speed, and lights carriage lamps at dark, he may feel himself free to come and go at will. If we should endeavor to read the future of automobile traveling in the light of past history concerning bicycles, I might confidently affirm that the motor carriage will increase its hold on the public favor and that money will be rapidly made by those who will embark in the business. It is for this reason that I would like to impress on our constructors at home the advantages that would accrue to them from intelligent competition.

Might I be allowed to say, in order to avoid disappointment, that it is of paramount importance that our competitors should not confine

themselves to the sending of advertising sheets, no matter how enticing, but to establish representative houses in some of the large cities; the public requires to see and to examine before purchasing articles involving considerable outlay.

Before closing this brief report I think it well to give some of the trade prices of French-made automobiles of the most modern type:

Description.	Number of seats.	Horse-power.	Price.
Carriage	2	3	$900
Carriage (with hood)	2		960
Dog cart	4		1,000
Wagonette	4	5	1,100
Vis-a-vis	4		1,200
Omnibus	4		1,200
Wagonette	6		1,200
Delivery van			1,200

An additional sum of $40 to $120 is charged, according to the number of seats, when fitted with india-rubber tires.

The carriages have generally three grades of speed—slow, moderate, and quick. The petroleum used is called here the essence of petroleum, with a specific gravity of 700, and costs 9 cents per quart. Some employ naphtha; it costs 1 cent more per quart and the cost of running is about 1 cent per kilometer (0.621376 mile).

At the time of writing this, I see by the newspapers that fourteen electric cabs are plying on the streets of London and give signal satisfaction.

HILARY S. BRUNOT,

ST. ETIENNE, *September 1, 1897.* *Consul.*

CLOCKS AND WATCHES IN URUGUAY.

WATCHES.

All watches, other than gold or silver, imported into Uruguay come under the heading of "ordinaries" for duty purposes, and are valued at $3 (gold) each, on which a duty of 31 per cent, 5 per cent, and 2½ per cent is charged, no matter how valuable the inside works of such a watch may otherwise be Silver watches, key winders, are valued for duty purposes at $5 each, and stem-winders at $7.50, and have to pay on this valuation a duty of 8 per cent, 5 per cent, and 2½ per cent. Gold watches, key winders, are valued at $20

each, and stem-winders at $30; the same enameled and with precious stones, $35; the same, so-called English, enameled and set with precious stones, either key or stem winders, $55; so-called English repeaters or chronometers, enameled and set with precious stones, $65, and are subject to a duty on these valuations of 8 per cent, 5 per cent, and 2½ per cent. Most of the watches coming under the heading as being exported from France are, in reality, Swiss (Geneva) watches, and are only shipped from French ports, thereby appearing in the custom-house entries as coming from France.

I am not quite certain, but am led to believe that some of the watches reported as being imported from Germany, in reality also come from Switzerland. As regards the watches reported as coming from the Argentine Republic, I know them to have been shipped thither from other countries to be reshipped to Uruguay.

It will be noticed that the United States hardly figures in the list of exporters of watches to this country, and as regards the better grades or fine watches, we have not even made a show; all of which, no doubt, must either be attributed to the lack of desire to extend trade to these regions, a lack of knowledge as to how to go about it, or inability to meet outside competition. Furthermore, watches, so far, are imported complete, and the custom prevailing in the United States, where cases and movements are manufactured and sold entirely independent of each other, is not yet known to the trade here, and it would seem that this very feature should facilitate the introduction of our goods in these lines, as coming from first hands to the large dealers, providing the custom-house authorities would not discriminate against us in favor of European exporters, which, to some extent, may be feared, on account of not having a commercial treaty with Uruguay, which, in some instances, has kept American manufactured goods out of this market.

CLOCKS.

In the export of clocks, we make a better showing, and the increase in 1896, as compared with former years, is especially noteworthy.

Clocks are divided into two classes—so-called table, or movable, and wall, or stationary, and are subject to a duty of 31 per cent, 5 per cent, and 2½ per cent, or a total duty of 38½ per cent.

For the purpose of assessing this duty, clocks are valued as follows: Table, or mantel, clocks of fancy styles are specially valued at time of entry; alarm clocks, of metal or otherwise, up to the size of 45 centimeters (17.7 inches), $2; from 45 to 70 centimeters (17.7 to 27.5 inches), $5; wall, or stationary, clocks, with pendulum or otherwise, $15; large, in cases, and chronometers for ships, $120.

Imports of clocks and watches into Uruguay during the years 1895 and 1896.

CLOCKS.

Whence imported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	Number.		*Number.*	
Germany	7,247	$5,681	2,964	$3,898
United States	752	2,834	1,982	7,006
France	57	285	334	1,717
England	8	109	182	523
Belgium	50	60	86	396
Argentine Republic	3	15	.....	.....
Italy	.....	.....	11	68
Total	.....	8,982	.....	13,608

WATCHES.

Watches other than gold or silver.				
France	253	761	48	144
United States	100	95	200	200
Germany	12	36	3,007	1,293
England	.....	.....	6	18
Total	.....	892	.....	1,655
Gold watches.				
France	179	6,160	354	11,355
Argentine Republic	150	4,630	.....	.....
Germany	12	320	27	840
England	1	60	.....	.....
Total	.....	11,170	.....	12,195
Silver watches.				
France	1,139	8,543	1,018	7,635
Argentine Republic	282	2,115	.....	.....
Germany	6	45	8	60
Total	.....	10,703	.....	7,695
Watch material.				
France	.....	887	.....	555
Argentine Republic	.....	379	.....	.....
Germany	.....	10	.....	266
England	.....	.....	.....	87
United States	.....	.....	.....	75
Total	.....	1.276	.....	983
Grand total	.....	24,041	.....	22,528

EDGAR SCHRAMM,
Consul.

MONTEVIDEO, *August 1, 1897.*

VELNA BRIQUETTE FUEL.

Various experiments made with the Velna briquettes show that the total calorific power of the fuel exceeds that of ordinary hard coal by 30 per cent, and tests made at the Brussels gas works with the briquettes, as well as with coal dust moistened with the petroleum mixture, resulted in the production of 450 cubic meters (15,892 cubic feet) of coal gas per ton, the quality being superior to ordinary gas. Recently, at the Cochet-Maillard works, in Paris, it was demonstrated that a poor fuel, positively useless by itself, was raised in calorific power from 4,000 calories to 6,400 calories (an increase of one-third), by the addition of 8 per cent of the Velna mixture and compressing into the form of briquettes; so that a worthless dust fuel was in this manner rendered equal to a medium quality of hard coal. The boiler in these works consumed 75 to 80 kilograms (165 to 176 pounds) of coal in three hours to maintain a steam pressure of 4 atmospheres, while with 65 kilograms (143 pounds) of anthracite dust pressed into briquettes with 8 per cent of the Velna mixture the same pressure was kept up three and a half hours, thus effecting an economy of some 30 per cent.

In locomotive firing, good results also seem to be obtained, a report from Gory stating that an engine drawing a train of 44 tons from Sancoins to Cosne consumed 174 kilograms (384 pounds) of the briquette fuel and 1,391 liters of water, the evaporative effect of the fuel thus being 8 liters per kilogram (0.8 gallon per pound). The fire was easy to control and no slag was produced, only a little white ash being formed.

To make the briquettes, petroleum residue, or the distillation residue from shale or other mineral oil, is mixed with any convenient animal fat and the whole saponified with soda to an emulsion which is used to bind together the particles of coal dust or other pulverulent combustible material, 1 to 2 cwts. of the emulsion being employed per ton. The remainder of the process (pressing) is the same as ordinarily practiced in briquette making, and there is, therefore, no need for special plant beyond a separate mixing tub. By this means, the various brown coals, which develop only 4,000 to 5,000 calories, and, therefore, can not compete with hard coal, are converted into a valuable fuel, giving over 8,000 calories, and the same applies to the immense quantities of coke dust, hitherto valueless, found in gas works.

The cost of producing these briquettes is low, those for industrial purposes being as follows: Ninety-four per cent of coal dust at 4s.

10d. per ton, 4s. 6d. ($1.09); 6 per cent of emulsion at 48s. per ton, 2s. 11d. (69.3 cents); working expenses, 1s. 7d. (38.3 cents); total per ton, 9s. ($2.189).

If an inferior quality of fuel be employed, the percentage of emulsion must be raised to 10 per cent, and the cost price will be: Ninety per cent coal dust at 4s. per ton, 3s. 7d. (87.2 cents); 10 per cent emulsion at 48s per ton, 4s. 10d. ($1.176); working expenses, 1s. 7d. (38.5 cents); total per ton, 10s. ($2.433). These prices are, in the first case, 25 per cent, and in the other, 16 per cent cheaper than coal; moreover, the briquettes develop greater heating power, 15 cwts. producing as many calories as 1 ton of coal, a circumstance rendering the former of considerable value for fuel on shipboard, where economy of storage is a consideration.

All German railroads, as well as private manufacturing concerns which depend largely on a regular supply of coal, keep a large stock of briquettes on hand to be used in case of a strike in the coal mines or shortage in the supply of coal.

MAX BOUCHSEIN,

BARMEN, *September 2, 1897.* *Consul.*

PORCELAIN INDUSTRY IN GERMANY.

The porcelain industry in Germany has, of recent years, exhibited a marked development.

In addition to the State factories at Berlin and Meissen (Saxony), there are many private establishments which are devoted to the supply of ordinary consumption, and the serious competition that the latter have to contend against has obliged them to turn out articles distinguished by an ever-increasing variety of design and perfection of manufacture.

According to M. Soulange-Bodin, French chargé d'affaires at Berlin, the German public could only find, at one time, high-class porcelain among foreign imports, and more particularly imports from France, but at the present time articles of German manufacture are found everywhere, and frequently on the French markets.

In 1880, the exports of German porcelain only amounted to 66,830 quintals (1 quintal=220 pounds), while fifteen years later they exceeded 201,000 quintals. During the last ten years, exports have more than doubled, and their value now is about 20,000,000 marks ($5,760,000). The principal markets are the United States and England and her colonies. After these countries come Holland, Switzerland, Austria-Hungary, France, Belgium, the Scandinavian countries, Chile, the Argentine Republic, and Brazil.

The porcelain industry is rapidly growing in importance, and the exports for the first three months of the present year amounted to 43,000 quintals, as compared with 34,000 quintals during the corresponding period of 1895.

MAX BOUCHSEIN,
Consul.

BARMEN, *September 2, 1897.*

STEEL INDUSTRY OF THE WORLD.

At the meeting of the German Ironmasters' Association, held at Dusseldorf, Mr. E. Schroeder read an interesting paper on the above subject, giving a full statistical and economical review of the development of the steel industry in the different manufacturing countries of the world.

In his introduction, Mr. Schroeder gave a short historical sketch regarding the Bessemer and Siemens-Martin processes, and called attention to the fact that, since the invention of the former about forty years ago, the total production of steel had to-day reached 16,000,000 tons. In 1890, the United States had taken the lead in the manufacture of steel, after passing Great Britain, which, in 1896, still led Germany by 700,000 tons. But while the statistics of the two former countries showed sharp fluctuations, the production of Germany had increased steadily since 1865, with but one exception (in 1883), when a decline of 15,000 tons from the preceding years was noted.

In Germany, the more intense development of the steel industry dated from the invention of the Thomas-Gilchrist process, in the latter half of the seventies, when the use of the phosphorus pig iron for steel-making purposes was made possible. Before this time, the production had hardly reached 500,000 tons, while in 1896 Germany was able to produce almost 3,500,000 tons. Steel rapidly replaced pulled or wrought iron.

Since 1895–96, there has been a slight reaction in favor of wrought iron, and in 1896 the production of this material again showed an increase. Regarding the proportion of the different steels produced in Germany, the following table is given.

Converter steel billets.

Year.	Bessemer.		Thomas.	
	Tons.	*Per cent.*	*Tons.*	*Per cent.*
1894	327,700	8.8	2,342,100	62.7
1895	315,600	7.3	2,520,400	62.6
1896	351,500	7.3	3,004,600	62.2

Open-hearth steel billets.

Year.	Acid.		Basic.		Direct castings.
	Tons.	*Per cent.*	*Tons.*	*Per cent.*	*Tons.*
1894	161,100	4.3	907,500	24.2	47,800
1895	168,000	4.2	1,021,400	25.4	55,100
1896	184,100	3.8	1,293,700	26.7	65,300

The steel industry of the United States and Great Britain were then treated by the speaker, but these statistics have already been published in both countries.

The French production of steel and wrought iron and the struggle between the two materials is illustrated as follows:

Year.	Steel.	Wrought iron.	Year.	Steel.	Wrought iron.
	Tons.	*Tons.*		*Tons.*	*Tons.*
1885	553,839	782,431	1891	638,530	833,409
1886	427,579	766,556	1892	682,527	828,519
1887	493,294	771,610	1893	664,032	808,171
1888	517,294	811,953	1894	674,190	785,781
1889	529,021	793,358	1895	714,523	756,793
1890	581,998	825,369	1896	883,508	814,643

The table shows that in France the production of steel and wrought iron is still fairly balanced. The same can be said of Belgium, where the production since 1884 was as follows:

Year.	Wrought iron.*	Steel billets.	Year.	Wrought iron.*	Steel billets.
	Met. tons.	*Met. tons.*		*Met. tons.*	*Met. tons.*
1884	471,040	187,066	1891	497,380	243,913
1885	469,249	155,012	1892	479,008	260,037
1886	470,255	164,045	1893	485,021	273,113
1887	534,056	229,321	1894	453,290	405,661
1888	547,204	243,647	1895	445,899	367,947
1889	577,204	261,397	1896	519,857	598,755
1890	514,311	242,566			

* Finished product.

Belgium produced mostly basic steel; the acid process is employed only at Searing, La Louviere, and one or two other steel works.

Austria-Hungary produced, in 1896, 868,834 tons of steel, namely, 120,103 tons of acid converter steel, 223,758 tons of basic converter steel, 21,057 tons of acid open-hearth steel, and 524,973 tons of basic open-hearth steel. The Bessemer process was introduced in this country as early as 1863, while the basic converter process was adopted in 1879, or only a few months after its invention. Of last

year's production, 60 per cent was open-hearth steel and 40 per cent converter steel.

The Russian production of wrought iron and steel, finished product, is shown by the following table:

Year.	Wrought iron.	Steel.
	Met. tons.	*Met. tons.*
1880	292,064	295,568
1885	362,282	192,895
1890	433,173	378,424
1895	421,942	574,112

Open-hearth steel predominates in Russia, official statistics of 1892 showing that in that year 366,000 tons of open-hearth steel were produced, as against 133,000 tons of Bessemer steel.

The following table shows the production of steel billets in Sweden from 1880 to 1895:

Year.	Wrought iron.	Converter.	Open hearth.
	Tons.	*Tons.*	*Tons.*
1880	216,875	30,017	7,719
1885	257,323	52,012	26,738
1890	281,833	94,247	72,985
1895	.....	97,294	96,475

The quantities produced by the different processes in 1895 were: Converter steel: Thomas billets, 17,824 tons; Bessemer billets, 79,470 tons. Open-hearth steel: Basic billets, 19,934 tons; acid billets, 76,541 tons.

The lively demand for Swedish Martin steel for bicycle purposes caused a large increase of production in 1896. A great number of new Martin furnaces, mostly with basic lining, have been built, and it is believed that the production of 1895 will be doubled in 1897.

In Spain, there are but four steel-making establishments, with an annual production of 104,577 tons (1896). The works are at Bilbao, Duro, Asturias, and Mieres.

Italy produced, in 1896, 55,000 tons of steel, as against 157,899 tons in 1889, when the highest figure was reached.

MAX BOUCHSEIN,

BARMEN, *September 18, 1897.* *Consul.*

TECHNICAL EDUCATION IN AUSTRIA.

The necessity of giving industry the assistance of technical schools should have been felt in the early years of this century, but it was not, causing great damage to the political economy of Austria. Manufacturing enterprises, based entirely on machine work, led to the degeneration of the workmen and mechanics in all branches where a certain handicraft had been required. Not only this, but home industry was not developed by home powers. Foreign capitalists and contractors brought foreign machines and foreign engineering or technical personnel with them, and no technical schools were established until these undertakings began to be enlarged or extended. As it was, however, these schools held but a very modest position. In civil or mechanical engineering, in the textile industry, and in architecture, foreign directors, engineers, and architects were the leaders, while Austrians were never more than assistants. The regeneration of Austria, after 1866, led to the reorganization of the entire school system. Technical education found in Eitelberger, Dumreicher, and the Minister of Commerce, Bauhans, valuable assistants. A visit to the first world exhibition in London (1851) ignited the spark that was to do so much for home industry. The beginning was an imitation of the South Kensington Museum, and the end aimed at, the entire independence and advancement of home industry. This institution, which cultivated chiefly the artistic side of industry, was soon followed by the Technological Industrial Museum of the Trades Union in Vienna, with its professional school. At this time, the system of study in the technical universities or colleges was also reorganized. Hitherto all professions had followed the same course of study, namely, two years of mathematics and science, and then two years of mechanical arts and building. Only the study of chemistry differed, in this respect, that students of chemistry were not considered regular students. After the reorganization, four divisions were added to the first two years: (1) The school of engineers, three years; (2) school of architects, three years; (3) school of mechanics, two years; and (4) school of chemistry, two years.

These technical universities are to graduate the men who are to hold the highest positions in the service of the Government and in the nation's industries. They are to be given not only a far-reaching knowledge of technological science, but are to be taught how best to take the initiative in independent operations. There is, however, too much purely abstract science carried on at these colleges. This

compels the graduates to do years and years of practical work before they can be duly recognized. As the chemist receives a practical education in the laboratory, so should the civil or mechanical engineer and architect. They should get obligatory practical instruction in the atelier or workshop. Modeling is necessary for all three groups, as is also forming. Carpentering and mechanical work is of inestimable value to mechanical technologists. Students of civil engineering and architecture should be obliged to prove that their long vacation had been spent in practical building. The separation of study and practice is not the least failing in the course of study, and is by no means lessened by the strictly scientific treatment of technical subjects and occasional excursions. Hence it happens that students who graduate with high marks, but who have neglected to do practical work during their time of study (they very rarely do work), enter the difficult channel of their practical profession as unpractical people, and are put behind men of lesser education but greater practical knowledge.

Theory and practice should pervade and further each other. This sentence should be engraved over every door and written on the cover of every book used in technical or industrial schools. In educating teachers, one should remember that, although scientific knowledge is not to be undervalued, it can also be carried too far. What makes the right teacher is far more the "I can" than the "I know how to." That pedagogical studies are a pressing need in the education of teachers is recognized on all sides. But two divisions of the technical universities serve industries, and then furnish nothing but directors and factory chemists; hence they can make no provision for the improvement and education of tradesmen and mechanics for smaller concerns.

The need of technical schools forced itself upon the ministry between 1860 and 1870 in the form of repeated petitions from the people. Then the Ministry of Commerce began to establish professional schools. Shortly afterwards, the Ministry of Education began to pay attention to technical schools. This developed a parallel action and healthy rivalry between the two ministries. In 1882, the Government put technical schools of all kinds under the Ministry of Education, to be administered by that body in cooperation with the Ministry of Commerce. The plan of organization and work was perfected by a regular commission of both ministries. The Ministry of Commerce retained to itself the right to select the sites and aims of the schools, regarding always the present condition and current and future needs of the industries interested or to be benefited. The Ministry of Education governed in the spirit of true didactics and pedagogics. Then, for the first time, did the people of Austria take

part in public instruction. A central commission for school affairs was formed, to which representatives were sent from all parts of the country. These took an active part in the formation of the entire technical and commercial school system.

The schools were at first modeled after foreign systems, especially after Baden institutions; but there was no intention to simply place a foreign system on home soil. It was, so to say, the grafting of foreign scions on the barren tree of Austrian circumstances; and they soon bore magnificent and surprising fruit. Herein lies Dumreicher's great merit. At first, indeed, directorship and certain studies were committed to foreigners; but conditions improved so rapidly that home intelligence was soon predominant.

The beginning of the technical schools were the drawing and modeling schools, as well as the private Academy of Architecture in Vienna. The Government assisted these schools by means of a subvention; but this was not enough. It was, therefore, forced to create a State industrial-school system; hence the origin of the State technical schools in 1875. They were so organized that, on one hand, factories and industrial concerns could be furnished with men of medium theoretical knowledge as bosses, foremen, draftsmen, or builders, well enough educated to understand and execute the intentions of their superiors; on the other hand, future capitalists and contractors and factory directors could receive theoretical and technical knowledge which would enable them to independently direct their concerns and to understand scientifically the connection between the operations of their respective trades. For the first category, the foreman school was intended. It demanded two years' practice before entering and lasted four half years. The so-called higher technical school was for the second, and lasted four years. With these two divisions, a Sunday and evening school for apprentices and public drawing rooms for masters were connected.

These State schools also served as a base of operations in organizing and reforming the smaller institutions of this kind. The execution of the bold plan of connecting all branches and lines of industry with the institution has given it the most widespread popularity. Whole categories of men can now be educated for home industry that hitherto had to be procured from abroad. Thus, the whole industry of Austria is enabled to make an end to the dangerous intellectual dependence of her production on competing nations.

The increase of industrial production in Austria demanded a consideration of the needs of industry as represented in the light of international culture and economy. A rational distribution of the technical schools essentially assisted the idea. Instead of a number of scattered and petty institutions, it was intended to establish a

limited number of technical institutions on a large scale in the chief centers of commerce and industry. Such schools were therefore created in Reichenberg, Prague, Pilsen, Brunn, Bielitz, Krakau, Vienna, Salzburg, Graz, Innsbruck, Czernowitz, and Trieste, from which mechanical, building, textile, artistic, and chemical industries draw their intellectual power. The idea of decentralizing technical and artistic genius and capacities by sending their bearers all over the Empire made the attainment of a simultaneous and equivalent industrial productive power possible. The inner formation went hand in hand with this fortunate outer organization. The teachers of homogeneous education were taken directly from practical activity, which suffered no interruption, so that an active contact with productive commerce conduced to an active intercourse of the same with the schools. Numerous journeys for the purposes of studying widened and enlarged the horizon of the professors and directors. Thus a school organism was developed that drew its reforming power from itself, which was further expressed in the drawing up of a normal course of instruction. When it is added that the pupils have the invaluable advantage of being introduced into lucrative positions immediately upon graduation, through the influence of their teachers, it is easy to ascertain what a sphere of activity such a system of instruction must command.

The attendance at the technical schools is constantly increasing, and industries begin to show results easily traceable to graduates of Austria's industrial, industrial-art, and technical schools. The scholars at these schools are obliged to become accustomed to practical work, and the skill they have attained in drawing and designing often keeps them at the designing or drawing table. Not only the technical scholars, but also those of the foreman school are too often inclined to become and remain draftsmen. It is a remarkable fact that, in spite of all the foreman schools, there is always a lack of good foremen. Only the establishment of workshop instruction can remedy this evil, and that not alone in the foreman schools, but in all technical institutions. By no means, however, would it be possible to do this without lengthening the course of study. It could not be introduced into a four-years' course without restricting or neglecting the theoretical branches; and in deciding an important question like this, one should bring the age, physical condition, and danger of overtaxation of the average pupil into consideration. The sooner this problem is solved, the better it will be for our pupil technical schools.

Austria is now sending technicians to those very countries whence she formerly received engineers. It is a pleasure to be able to repay the debt we owe them. We are of the opinion that public and tech-

nical education have an international character. Every effort toward universal education, culture, and refinement is of international interest; each should learn from all, and all from each. The plus of one country should go to the benefit of the others.

A useful member of the whole are the professional schools, though they have the same spirit as the technical schools. The reason for this may be in the fact that they attach more value to the productive than to the didactive lines. The world exhibition in Vienna in 1873 gave the first real impulse to the system that has done, is doing, and seems destined to do much. The Ministry of Commerce tried to strengthen the existing concerns by means of subventions. It also favored the establishment of private workshops with boarding schools attached, where a limited number of apprentices received practical instruction as well as lessons in modeling and drawing. Time proved, however, that this was not enough, and the Government was forced to organize branch schools with workshop instruction for the different trades. Saxon schools served as models at first, but simply copying them developed so many difficulties as to be a source of many disappointments. The points of view considered in their organization were as follows: Technical professional schools must be organized as educational institutions, not simply as workshops; instruction in the mental foundation of each branch must assist the actual practical work. The chief attention must be given to the qualitative demands of the trade. There is a great difference between the workshop of an industrial undertaking and a school with workshop instruction. The pupil must receive a more complete education in his branch than he would in a private establishment. The school would not have attained its object if no more was learned than in any workshop.

Great care must be taken in the choice of location for these schools. Regard to petty local jealousies, the initiative of interfering, ignorant, or officious laymen, the occasional patronage of single men or corporations, would result in a work of caprice instead of a systematically organized school, in a system without order—consequently, results far from satisfactory. The central commission, selected, places a school only where there was enough trade of one special branch to warrant the establishment of a branch school. The suitable situation for a professional school—industrial, industrial-art, or technical—is one where there is a decided tendency toward one line of industry. The teachers were taken from the professional courses of the polytechnicums, the master schools of the Academy of Fine Arts, and the professional schools of industrial art; but also trained practitioners who had never had any professional education were admitted. One failing these men all seem to have in

common—they lack a knowledge of school affairs and of the art of teaching; they instruct in an autodidactic manner, so that the schools never rise to anything better than amateur concerns.

Branch schools can only be capable when at least equal to good practical work, when nothing absolute is ever taught, and the teachers understand the daily demands of their lines of industry. Considering the school from a somewhat higher standpoint, that element of science which characterizes it, in the first place, must be common to the whole corps of teachers. An activity with a certain aim in view would tend toward the attainment of this. Before all things, it should begin with an authoritative initiative from above. Frequent school inspections, followed by a communication of the results and instructive explanations to the assembled corps of teachers, would render a great support to the work. The teachers should be compelled to hold periodical conferences, giving the most minute attention to all school affairs and stating the result of their consultations in a conference report, which should be controlled by the inspection organ of the Government. The teachers should be allowed to successively undertake journeys for the purpose of studying; but the results of these trips should be for the benefit of the school and common property of all teachers. Though variations in the arrangement of this professional school is allowed—in fact, approved of by the Government—nevertheless, an increased exertion should be made to form normal plans of instruction, at least for schools with similar aims. We have, however, no uniform plan for the schools in mind. A certain play must be left for the different circumstances to which these schools may be subjected.

As a final chapter to this picture of Austria's technical educational institutions, remains the improvement schools and the mechanics' or tradesmen schools. Of course, these schools are also divided. In the improvement schools, the purely industrial and commercial lines are separated. They are all evening and Sunday schools, and the course usually includes late autumn, winter, and spring. Pupils not requiring drawing, later, are not obliged to take it. The expenses are paid by the Government, communities, chambers of commerce, trades unions and associations, and by private parties, who, in return, are granted a certain influence in the school committees. The teachers are not especially nominated for the schools, but consist of local teachers, who receive a remuneration for their services and are allowed to fit themselves for this purpose at the State technical schools. The value of these improvement schools will become more and more recognized when the attendance is more regular. This will not be until Austrian schools are on a level with those of Würtemberg. There, instruction is also given in the morning from

6 to 10. The fact that they are well attended shows a marked recognition of the value of these schools on the part of the pupils' masters. The attendance is voluntary, but the management is very strict. Those that neither know nor want to learn are turned over to schools which they are obliged to attend. This is a sort of degradation. The communities cover half of the deficits, if any. The result is that no schools are established where there is not much interest in them. The local school director covers a large sphere of activity and requires a man highly educated and of good judgment. The good results of such an organization have already been seen in Würtemberg, and are giving evident aid in Austria day by day. All schools receive annually a thorough inspection. School exhibitions are periodically arranged, to which all drawing teachers are summoned for the purpose of study and observation. In a general assembly of all the teachers, the deficiencies that have been discovered in the exhibition are criticised, and rules and regulations are passed to prevent them in the future. This system has proved a great success in Würtemberg and Saxony, and Austria should take a hint from it.

The keystone of our technical schools are the mechanics' schools. Their purpose is to give pupils the most universal, uniform, and careful preparation for all technical and industrial schools, as well as to fit them for their trades or professions. They are divided into two and three year schools, but the third year is not obligatory. As the first two years are during the time in which the pupils are compelled to attend school, the course is much the same as that of the public schools. They are connected with an improvement, or further developing, school and contain a public drawing room for masters and assistants. The characteristics of the schools for mechanics are: (1) They are not for members of one branch, but of several different branches; (2) not for boys from 15 on, but for boys from 13 to 15; (3) not to finish, but to prepare. Their great advantage is their easy access for those boys in big and little towns who will never be in a position to have a technical education. They strengthen industry by introducing youth early in life to the sphere of ideas of their later profession or trade and are a benefit to the older generation of mechanics by affording them the assistance of public drawing rooms. They are, besides, a help in augmenting good industrial improvement schools, thereby forming a solid basis for the entire system of technical education. Every effort should be made to establish a system of schools for mechanics. Such a system will be the best possible gift to our tradesmen and manufacturers. Nor is there any doubt that workmen and employers will make the use they should of these institutions.

Austria should possess three industrial-art schools, one institution for photography and reproduction, fifteen State technical schools, about one hundred and ten professional schools, four hundred improvement schools, four general drawing schools, four drawing and modeling schools, and, finally, eight universal mechanics' schools.

Besides the introduction of these necessary aids or adjuncts to our system of technical education, there should be a reorganization of the central boards by nominating State central school inspectors; second, a union for technical-school affairs should be formed; and, third, an organ for the publication of these matters should be established.

Much comment is not called for. Austria's object is to equal any of Europe's states in the matter of industrial, industrial-art, and technical schools. Thus far her success has been certain, if not phenomenal. She has gone along lines laid out for her by men of large learning, lofty patriotism, and unselfish purposes. Beginnings that were bad have been or are being remedied. Nothing new, if good, is being neglected. What she was in 1866 is not unlike what we are now and have been for a long time. There is no denying the need of these schools; there is only one way to get rid of the need, and that is by building along lines similar to those followed by Austria.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *September 6, 1897.*

CALIFORNIA DRIED FRUITS IN FRANCE.

There seems to exist in this consular district (Roubaix) and in northern France generally a market for California dried fruits, which, with but little effort, could be made profitable. I refer to dried apricots, dried peaches, prunes, raisins, and candied fruits.

A few small consignments of California prunes have been received in this consular district, and I am informed that the result obtained from their sale has been satisfactory. The price paid here for a good quality of prune, which, however, is generally admitted to be inferior to the California prune, is from 17 to 18 cents per pound.

The through rates from San José to Havre are: Boxes, barrels, or kegs, car-load lots, $1.25 per 100 pounds; packed in sacks, $1.45 per 100 pounds.

The duty on prunes imported direct from the United States is 10 francs per 100 kilograms ($1.93 per 220.46 pounds).

The carriage from Havre to Lille, Roubaix, Tourcoing, etc., is not quite 1 cent per pound.

The total quantity of prunes imported into France from the United States in 1896 was 147 tons, and this quantity would have been more than doubled if sufficient attention had been paid to the requirements.

I have been informed by a large wholesale grocer that the city of Lille alone consumes from 50 to 60 tons of prunes per year.

I would suggest that exporters interested should send a suitable man to visit the dealers in the northern part of France, believing that such action would lead to a large increase in our export business in dried fruit.

W. P. ATWELL,
Commercial Agent.

ROUBAIX, *August 26, 1897.*

SOYA AS FOOD AND FODDER.

The following is a translation from an article by M. Henri Fortune, the well-known French agriculturist:

There exists a plant extensively cultivated throughout China, Japan, Cochin China, and Tonquin, of which the culture on clay and flinty clay lands would be an excellent experiment for agriculturists and persons interested in the progress of agriculture. This plant acclimatizes perfectly in Belgium.

It is employed in the above countries as a food and for divers other purposes. Transformed by cooking into a pulp, which is mixed with salt and rice, we obtain the "miso," which constitutes the regulation breakfast of the Japanese. I have eaten this preparation in Yedo in 1892, and I found it excellent in taste and very nourishing.

Mixed with barley, fermented with water and pressed, this product yields a sirup known as the "soya," which is, so to speak, the unique sauce for all and every Japanese dish, and is employed in such large quantities that the works in the town of Nagasaki have a yearly production of 2,000 tons. The soya also yields a very superior quality of oil, which advantageously replaces olive oil.

Dr. Menudier has, moreover, spoken in high terms of this plant, as producing a quality of flour which, when made into bread, is found to be of great use to people suffering from diabetes, especially that form of the disease which is characterized by large quantities of sugar in the urine. Nearly all doctors pronounce this malady as practically incurable, and all the arts of pharmacy have been exhausted to no end to find a cure. The soya, however, is poor in starchy materials, which are the enemy of diabetes, and rich in nitrogenous and fatty materials.

The bread made from the flour of the soya is as good as cake without sugar, and is very appetizing, and is not to be compared with gluten bread, which constipates.

The wheat bread contains 9½ per cent of nitrogenic materials and 5¼ per cent of fatty materials, while the bread made from soya contains 22¼ per cent of the first and 48 per cent of the second above-mentioned materials. One can therefore say, with justice, that the soya bread is twice as nourishing as wheaten bread, five times as poor in starch, and ten times as rich in fatty materials, and, once its qualities are fully known, the soya may be pronounced the bread of the future.

Recognizing the nourishing qualities of this bread in fat materials, nitrogen, and phosphoric acid, its consumption would be a great advantage to debilitated persons, convalescents, etc.

All bakers selling the soya bread carefully guard the secret of their mode of preparation, and, in consequence, the bread is very dear. Soya bread in Paris costs 4 francs per kilogram, which is a price out of the reach of the poor; but if the culture of this plant were extensive, it would be very easy to reduce the price.

The recipe for making the bread is as follows: Six hundred grams of flour, four eggs, 200 grams of fresh butter, one teaspoonful of salt, and a glass of lukewarm water. This bread can be made in every household; its taste is agreeable, and the baking can be done in an ordinary oven.

In China, the soya replaces milk, which the Chinese do not drink at all. To make this milk, the grain must be crushed, put in a sieve, water slowly poured over it, and a product obtained having all the qualities of milk.

The cheese made from soya is delicious. The grain is softened in water and pounded in a mortar. The pulp compressed in a cloth gives two parts; that which is hard is used to feed poultry, etc., and the other, which passes through the cloth, is albumen, and is put on the fire, the curds separated with the aid of rennet, and, when coagulated, a little salt is added.

Another use of soya, perhaps not less important than the uses already described, is the following: Cultivated under favorable circumstances, it will yield not only a good crop of fodder, both green and dry, very nitrogenous, and in consequence very nutritious, but such a large crop of seed that there are as many pods on the plant as there are leaves. The seeds when cooked resemble the haricot bean, and can be cooked in butter and served with meat.

We have a project in hand to call together the principal Paris restaurant keepers this winter, to allow them to partake of this new vegetable, which will advertise it throughout the world under the patronage of such substantial connoisseurs.

In a few years hence, one will buy soya at the grocers, as to-day one buys beans. It is an excellent substitute for hay, and keeps horses in good condition, and cows, when fed on it, will yield at least 20 per cent more milk daily then when fed on ordinary hay.

The soya produces per hectare (2.471 acres) from 2,500 to 3,000 kilograms (5,512 to 6,614 pounds) of seed, especially if phosphate fertilizers are sufficiently employed.

The seeds are sown broadcast or drilled after plowing and harrowing. The germination occupies from twenty to twenty-five days. It is better to soak the seeds in water to facilitate germination. Seed should not be sown if their age is not known. Seed two years old are not a success.

Under favorable conditions, with sufficient heat, etc., the soya soon covers the earth with a luxuriant herbage, which becomes so dense that even the rabbits browse the borders without being able to obtain access within.

If the seed is needed, the harvest is made about the end of September. It is then dried and carried to the thrashing floor to be thrashed, and pods and straw are then stored in the barns. These are employed for the divers purposes which have been indicated, and, during the long winter months, the fodder is readily consumed, it possessing all the qualities of grain, being three times more nourishing than lucern or ordinary hay.

If the seed is not desired, it can be given in a green state to animals; all animals eat it readily.

We advise cultivators to plant the soya; it will be found profitable. The best time for sowing is during March.

STEPHEN H. ANGELL,
Commercial Agent.

ROUBAIX, *July 13, 1897.*

AMERICAN BUTTER AND LARD IN VENEZUELA.

BUTTER.

The following is the classification in the tariff upon this subject:

Third-class, No. 161, paying a duty of about 5 cents in United States gold per kilogram (2.2046 pounds)—"lard and butter, pure, with exclusion of all other mixtures."

Fourth-class, No. 259, paying a duty of about 15 cents per kilogram—"lard mixed with other greases or fats, as also oleomargine."

I can not too strongly urge the attempt to secure the control of the butter trade of this country.

From June 30, 1896, to June 30, 1897, there were imported into this port (Puerto Cabello) from the United States 17,866 kilograms (39,394 pounds), while, during the same period, the imports from Europe amounted to 83,276 kilograms (183,620 pounds). Danish butter is almost entirely used, constituting practically the entire import of Danish products, but, being shipped from Hamburg, figures as a German export.

Our butter possesses an extremely bad reputation. Merchants here contend that our good butter is too high for, and will not keep in, this market. The following prices paid for Danish butter will contradict this statement and show the falsity of both complaints:

Quantity.	Cost at Hamburg.	Cost laid down (duty, etc.).
	Pence.	*Cents.*
200 grams (one-half pound)	8¼	40
400 grams (1 pound)	15¼	38
800 grams (2 pounds)	22¼	38
4 pounds (English) per pound	15	.....
5 pounds (English) do	14¾	37
7 pounds (English) do	14½	37
14 pounds (English) do	14	36½
28 pounds (English) do	13½	34½

This butter is packed in hermetically sealed tins of from half a pound to 25 pounds, as indicated, and was, so the merchants here claimed, unequaled by that of any other country in the world. Its reputation was such that it passed the customs officers without that rigid inspection to which our butter was subjected. In fact, the class of butter and lard imported from the United States is mainly given the credit for the recent change and enactment of the law upon the subject and the establishment of certain tests prescribed by the national laboratory. These tests, applied to certain Danish

butter heretofore above suspicion, disclosed an adulteration which surprised and shocked the merchants as well as the people. I am therefore confident, should some of our reliable brands enter into competition in the present chaotic state of the butter market and successfully pass the first examination, the future ones would be greatly relaxed, thus securing for our products an immediate advertisement.

LARD.*

Forty-five cases of impure lard, invoiced as pure, have, within the last week, been confiscated. I know the officials of this Government are sincerely desirous to encourage the importation of our butter products, and I have been personally assured within the week that brands which win their confidence may expect the most considerate treatment. It is such incidents that enable the Europeans to create the impression that all our goods are of the same class. There being no American houses to push our goods, to disclose the real trouble, our butter, for instance, for which the price paid is less than half that of Danish butter, is made the criterion of our production and comparison with others.

During the period mentioned, Puerto Cabello has imported 500,117 kilograms (1,100,750 pounds) of lard, which indicates the extent of our trade in this product when the whole country is considered. But if this practice of selling adulterated food continues, we are apt to lose this trade, as the Government may finally surround the examinations with so many difficulties as to discourage the shipment of even our best and purest. Many merchants here are to blame for this deplorable state of trade, they attempting to get the cheapest stuff possible; others, to compete with them, are compelled to purchase similar goods.

The only way to come in contact with the reliable merchants here is either to send an experienced man or make some satisfactory arrangement with a good exporter of general provisions in New York.

* Minister Loomis writes from Caracas, under date of September 30, 1897: "Since the revision of the Venezuelan tariff law (see CONSULAR REPORTS No. 205, October, 1897, p. 233), a condition of anxiety exists among United States shippers of lard and butter to this country, for the reason that, while the duty on pure hog lard and pure butter is fixed at 5 cents (United States) per kilogram (2.2046 pounds), the duty on lard or butter containing other fats or components is 15 cents per kilogram, and it was intimated that all lard and butter would be subjected to a chemical test upon its arrival in Venezuela. I have received a number of letters from New York firms engaged in the exportation of lard and butter asking me to make earnest protest if the lard arriving by the *Venezuela*, the last steamer from New York, was seized, as was the case with that carried by the first boat that came from the United States after the application of the new regulations. It was intimated to the Ministry of the Treasury that if American lard which had been declared pure by the expert chemists in the Department of Agriculture was seized in Venezuela it would stop the shipment of lard altogether, and so cause the loss of an important source of revenue to the Government here. The suggestion seems to have been effective, for the time at least, and the steamer *Venezuela* landed about 130,000 pounds of lard at La Guayra for this city, none of which has been detained. Some of it was examined by a chemist at the port of La Guayra, but I can not ascertain that any of it was analyzed by the Government chemist here."

Letters to consuls and merchants will be futile. The one can not recommend, nor will the other "buy a cat in the bag," with his past experience.

Violations of the law—invoicing impure (class 4) as pure (class 3)—not only causes confiscation of the goods, but a penalty of double the amount of duties assessed on class 4.

The following are some of the tests prescribed by the national laboratory for lard:

(1) Absorption of iodine (index of Hübl.), referring to the total oily acids of 52 to 69 per cent or referred to the neutral substances, which are obtained by multiplying the former numbers by 0.955.

(2) Index of saponification (Köttstorfer), in milligrams of potash (K. O. H.), from 190.7 to 205, or its equivalent from 294.14 to 272.64.

(3) Index of Reichert-Meissl-Wolny (R. M. W.), from 0.4 to 0.6.

(4) Point of turbidity, from 24.1° to 28.7°.

(5) Reaction of Becchi-Millian and reaction of Welmans; negatives.

(6) Sulphuric saponification (index of Maumene).

(7) Saturation of 1 gram of oily acids in cubic centimeters of normal soda (Na.O.H.), from 3.58 to 3.68.

(8) Fusion point of the fat acids, from 37.5° to 45.8°.

(9) Point of solidification of same, 34° to 42.7°.

(10) Fusion point of the neutral substance, 28° to 35.6°.

(11) Point of solidification of same, 34° to 42.6°.

(12) Nitrous vapors (Carlletet), solid masses.

(13) Density, to +75°, taken with Mohr's scales, 0.913 to 0.916.

With regard to butter, its reactions are:

(1) Index of Köttstorfer, in milligrams of potash (K. O. H.), 220 to 243.9.

(2) Index of R. M. W., 26 to 32.

(3) Index of Hübl., 26 to 35.5.

(4) Index of Hehner, 85 to 89.

(5) Point of solidification of the fat acids, 38° to 40°.

SAMUEL PROSKAUER,

PUERTO CABELLO, *October 14, 1897.* *Consul.*

OPPORTUNITIES FOR AMERICANS IN VENEZUELA.

So much attention having been recently given Venezuela, her richness and resources dilated upon in print and private letters, it is but natural that every mail should bring many inquiries and requests for information To answer all personally would be a severe task. Mechanics, lawyers, physicians, dentists, laborers, accountants—all

confess their inability to speak Spanish, but who could, according to their belief, "learn to speak it in six months."

In the case of skilled mechanics, I must say that this country affords little encouragement for them. There are few industries, and these are supplied by Spanish-speaking workmen. To come here without a contract with a responsible party and some funds invites misery and suffering of the worst kind. I have relieved abject want as best I could, because the individual had come here "trusting to luck to get a job." Once stranded, it is difficult to get away, and the consequence is that an excellent mechanic of former honorable character has, from force of circumstances, turned tramp.

Doctors and dentists must pass an examination, and often six months elapse before they reach the examining board. Even if they possess an unusual aptitude to acquire the Spanish language and are possessed of an unusual degree of professional knowledge and skill, they must also possess an unusual amount of patience and fortitude to win the confidence of the people. This would require time and money. Furthermore, the country is well supplied with able and distinguished physicians.

The practice of law is so different from ours, the language so rich and susceptible of so many meanings, I doubt if a foreign lawyer could acquire the command of it sufficient to practice his profession.

In the case of accountants, great difficulties present themselves. As stated in my previous reports, the trade of the country is largely in the hands of the Germans, whose chiefs, as a rule, reside in Germany. These recruit their forces with young men whom they personally know, speaking English, French, and Spanish, in addition to their native tongue. They are thoroughly trained for the position, their advancement sure, and hence enter the business with personal interest and enthusiasm. Houses of all nationalities are not only imbued with the patriotic feeling that prompts them to buy "at home," all things being equal, but, for like considerations, prefer to engage their countrymen for vacant positions. Even if our young accountant possesses all the requisite qualifications, it is extremely hazardous to come here simply "trusting to luck to secure a position," something I strongly advise against. If he can arrange for employment before coming and has a little money in reserve for contingencies, his opportunities to advance in life are very great, depending then solely upon his individual character and ability.

Unskilled labor is not wanted, and those whose only possessions are "a willingness to work at anything" had better remain at home.

There is, however, one class of Americans who could succeed in this country, namely, the American farmer; but even he, like the

birds, would have to flock together. A single family would hardly succeed. A colony, small or large, industrious and thrifty, could soon acquire a knowledge of the manner in which the various crops are raised in this country and those most suitable for the various altitudes—cocoa, cocoanuts, bananas, etc., for the lowest; corn, coffee, etc., for the temperate zone; wheat, etc., for the highest, while raising cattle, making butter, etc., would certainly prove profitable. Though the Government would, in all probability, donate the land, it is well to bear in mind that each family would require funds to put the farm in condition and have some money to live upon, awaiting first returns. Colonizers and strangers without proper recommendations are to be avoided.

These details fully understood and considered, the climatic and other conditions which the newcomer would encounter, are such as would make the undertaking extremely pleasant. There are many ideal spots for such colonies—along river banks and in the valleys, in the midst of beautiful tropical vegetation, surrounded by high mountains and picturesque scenery, the natural tropical warmth of the coast tempered by the constantly prevailing cool trade winds, while the higher altitudes of the mountains are always temperate and pleasant, making an almost perpetual spring, and the virgin richness of the soil seems to beg for attention and cultivation, which would, with little difficulty, yield in return three crops of corn and three of tobacco each year, awaiting a ready market here and abroad. All this appeals to me as the one thing I can conscientiously commend and know the Government is desirous to encourage.

I would impress upon every one coming to this country that the cost of living is very high. Nearly all manufactured articles are imported, as well as the main articles of daily consumption, such as flour, lard, butter, potatoes, rice, etc. It is true these people are devoted to agriculture, but only to such products as grow the most readily in the country.

A large immigration and development of the country would remove many of the difficulties that beset these people. Space is too limited to further dwell upon this subject.

GOLD DISCOVERY.

Within 30 miles of Puerto Cabello, "as the crow flies," discoveries of fine gold quartz have recently been made, the reports of which are gradually creeping into print here and in the United States. I consider it wise to caution against a rush of immigrants or gold seekers, ignorant of the law, language, habits, and customs of the country. Those in control of the discoveries are honorable

men, of high standing in the commercial world, and I am sure have kept their information to themselves for the purpose of preventing such a calamity as must ensue if large numbers come to this country unprepared and without money. I am acquainted with all, intimately with some, who made and control these mines, and the Department may rest assured I shall not fail to give it a true and early account of the developments as they take place.

SAMUEL PROSKAUER,

PUERTO CABELLO, *October 10, 1897.* *Consul.*

AMERICAN ENTERPRISE AND TRADE IN VENEZUELA.

CUTLERY, GLASS AND EARTHEN WARE, TOOLS, ETC.

I must again call attention to these articles, believing that our trade can be largely increased. A medium and ordinary grade of tools—files, saws, chisels, hatchets or axes, hammers, and especially the machete—will find readier sale than the highest grade. In my report published in CONSULAR REPORTS No. 184 (January, 1896), I fully described the machete and the desirability of obtaining its sale.

TOBACCO, BROOMS COAL, ETC.

The importation of chewing tobacco was formerly prohibited, but though this restriction has been removed, the high tariff on all tobaccos is apt to interfere with large importations, and will greatly encourage the present extensive native cultivation and manufacture of all kinds of tobaccos. The quality grown is of a very high grade, and, with an increased knowledge on the part of the laborer and the system of curing, may soon become an item of export.

In former years, Venezuela imported our brooms, marble, and various other articles of like character. These sales have been supplanted by native industries. The discovery of a magnificent quality of marble about 6 miles from Puerto Cabello and the erection of a plant (costing over $50,000) for its development has practically destroyed our exportations. The company is turning out some fine work, which is becoming widely known.

Coal is imported from England, and is almost entirely used by the railroads, these being, with one exception (Valencia and Caracas Railroad), English. A strong effort is being made to introduce Pocahontas coal, with many chances of success.

LEATHER AND STEARIN.

Leather is another highly protected industry, and native tanneries have exclusive control of the sole-leather trade. Imported uppers mainly come from France and Germany. We secure a small share of the trade, but, with proper push, could secure a larger amount.

Stearin is imported from Amsterdam. It is used in the manufacture of candles, one of the chief industries of the country, and protected.

BEER.

Beer in large quantities was formerly imported from the United States, England, and Germany. The establishment of breweries at Caracas, Puerto Cabello, and Maracaibo will soon reduce these imports to a mere nominal figure. The plant at Puerto Cabello is a fine structure, with the most improved machinery, having a capacity of 100 hectoliters (2,642 gallons) in twenty-four hours. At the present time, it is turning out about one-third of its capacity, and, though only in operation about seven months, is making an excellent quality of beer. The plant cost about $200,000, and the company has an additional large working capital. Its shares are held entirely by German capitalists.

BANKS, EXCHANGE, CURRENCY, ETC.

As I have heretofore stated, our trade with this country is greatly hampered by the absence of American houses, banks, etc. It is almost needless to say that all large houses have their American connections, but it is obvious that this does not supply the place of intercommunication between American houses in the United States and their branches here.

One of our greatest trading difficulties might be more fully understood, generally advertised, and acquiesced in. I refer to the system of giving six, nine, or even twelve months' credit to enable the merchant to realize at "crop time." Banks being limited, and none at all in some places, merchants are at the mercy of money lenders, if they must pay their bills in sixty or ninety days, as with us, which means interest at the rate of 1 or 1½ per cent per month, and not infrequently more. Rates of exchange could thus be more readily controlled, which, though seldom burdensome, sometimes reach an unreasonably high figure.

The currency is practically upon a gold basis, silver and gold being interchangeable. The issuance of paper money by the Government being still inhibited, the only notes that circulate are those of the Bank of Venezuela and Bank of Caracas, confined to local use, but preferred in ordinary transactions to gold on account of convenience and the high credit of the banks.

The gold coins of the country are 20, 25, and 100 bolivars; silver, one-fourth bolivar, one-half bolivar, 1, 2, 2½, and 5 bolivars. The value of a bolivar in United States currency is 19.3 cents.

PUERTO CABELLO HARBOR ACCOMMODATIONS.

New wharf.—The new wharf, upon which two years of hard labor was bestowed, has just been completed. It possesses a frontage of 1,500 feet proper, while at least 500 feet more can be readily utilized, making it practically 2,000 feet long. The custom-house and sheds adjoin the wharf and are conveniently arranged for the transaction of official business, loading and unloading vessels. The picturesque scenes which surround this port, the entrance to the harbor, and these late improvements present a charming sight and elicit the admiration of the stranger.

The wharf is constructed of iron and cement in tasteful designs. The water is 26 feet alongside.

Water supply.—The water mains of the city run its entire length, enabling four or five steamers to take water at the same time. The natural pressure is sufficient for sailing vessels to fill their tanks. Its quality is recognized as superior to any in the West Indies or on this coast, and is preferred by masters of ships to that of any other in this vicinity. The water tax is 1 bolivar per registered ton up to 500 tons. Vessels in excess of this tonnage pay only this maximum, amounting to about $80 of our money. This payment entitles vessels to take water again on their homeward trip. The water tax is imposed without regard to taking water.

Shipping charges.—With the exception of the water dues, vessels are exempt from all heavy port charges, the following constituting the entire: Translation of manifest, $4; stamps and stamped paper for clearance, $2; interpreter's fee, $4; doctor's visit, $2.50.

Light-house.—The light-house at Punta Brava, about 1 mile north of the harbor, is at present using an ordinary ship's lamp, but the electric lights at the wharf, sometimes seen at a distance of 30 miles at sea, furnish the mariner with a certain guide to port.

Harbor.—The harbor is 325 feet wide at its narrowest point and from 26 to 60 feet deep. The entrance to the harbor lies within a landlocked bay about 30 miles wide, with a depth of 60 to 100 feet at the most desirable points of anchorage. The bay is at all times gentle and placid, within which storms or wrecks are unknown.

The tides are very low—the neap tide is 14 inches and the flood tide 27 to 28 inches. The figures given here contradict those published in the September issue of CONSULAR REPORTS, but are absolutely correct. The level of the water is usually about 4 feet lower than the wharf, and only in November and December is the flood

tide 28 inches. Were the figures published correct, the wharf and town would be about 10 feet under water. My figures have been in the possession of the Department for some time.*

The loading and unloading of cargoes are accomplished with great rapidity, due to the skill and training of the longshoremen, produced by constant work of that character.

With this brief description of the harbor, wharf, etc., it will be seen that Puerto Cabello possesses unusual shipping facilities.

CARACAS SAMPLE WAREHOUSE.

As is generally known, this warehouse is to be established under a special concession of the Government of Venezuela to the National Association of Manufacturers, Philadelphia. Its object primarily is to enable merchants and manufacturers to exhibit their goods under the most favorable conditions, and the terms under which their samples for exhibition are permitted to enter the country are most advantageous, among which may be mentioned exemption from the payment of duty. Space is to be allotted to exhibitors for the tasteful display of their wares, for which a small fee is to be charged. Should this become an accomplished fact, the results will justify the oft-given advice of consuls—to bring seller and buyer into closer contact.

Its usefulness will at first be confined to the large and rich territory contributory to Caracas, using the best and highest grade of goods, but its fame and benefits will no doubt induce merchants from the central and western portions of the Republic to inspect it. The actual sight of the goods or manufactures, their comparison with similar articles upon the spot, the interchange of opinion between American representatives and Venezuelan merchants with regard to minor details of purchases, must prove instructive and profitable to both and disabuse their minds of serious misconceptions. The Government is doing its utmost to encourage the undertaking, while the friendly feeling of the natives for everything American will certainly induce them to exert their influence to crown the efforts of its projectors with success.

CABLE, TELEGRAPH, AND RAILROAD SERVICE.

The recent completion of the cable line from here to La Guayra, thence to Curaçao, Haiti, etc., to New York has proven of infinite service to the merchants of Puerto Cabello. Formerly messages

* The figures in the September number (204) of CONSULAR REPORTS, page 133, are as follows:

"*Puerto Cabello.*—Soundings taken May 5, from east of Castello Libertador to the south of the bay: Entrance to harbor, 54 feet; center of the canal, 42 feet. Landings at the quay: First, 24 feet; second, 24 feet; third, 24 feet; fourth, 24 feet; fifth, 21½ feet. There is a difference of some 13½ feet at high tide.—*Soundings of the harbors of La Guayra and Puerto Cabello, from a report by Consul Plumacher.*

passed over the national telegraph lines to Caracas, and thence to La Guayra, often causing delay of many hours, not infrequently days, and sometimes giving imperfect service. Its present reliability has been productive of its more frequent use and merchants' cable orders to New York for goods have increased It is believed that this service from Coro will be in operation shortly.

As heretofore reported, the telegraph system of the country is owned and controlled by the National Government and connects the various smaller places (which can not be reached by rail or other rapid communication) with Caracas. This, in a large measure, supersedes and often avoids the evil consequences of the mail facilities. The rate charged for messages is much less than in the United States and can be used in cases of urgency without being a heavy burden.

The old railroad schedule between Puerto Cabello and Valencia will be restored in a few days, giving two passenger trains daily, that of the morning, as now, connecting with the Caracas and Valencia Railroad and arriving in Caracas about 5.30 p. m.

NEW WATER ROUTES, ETC.

The Tocuyo Navigation Company, an American enterprise, recently organized for the purpose of exploring the river of that name, will, I think, meet with success. I am not prepared to give the detailed plans of the company. Its general objects are to colonize the rich lands along the river banks for the cultivation of cocoa, tobacco, and bananas, and, in the higher altitudes, corn, coffee, etc., and to bring the larger and smaller towns up the river into closer business communication with Puerto Cabello, which have heretofore labored under great disadvantages in getting their less valuable freight to market. They have one good-sized steamer at work, with a large number of laborers cleaning out the river. I hope, in opening up this section of the country, the company will be instrumental in introducing American goods. During the last few weeks, the Lake of Valencia has been navigated by a small steamer in connection with the German railroad. The lake is 22 miles long and 10 miles wide. As the railroad skirts the lake only on one side, this new arrangement will bring all the towns situated on it into closer communion and enable them to send their freight to the stations by a less circuitous, cheaper, and more rapid route.

Along all the waterways of Venezuela many valuable woods abound in their virgin growth, among them cedar, mahogany, vera, etc., which justify investment on the part of capitalists and lumbermen after judicious investigations.

SAMUEL PROSKAUER,

PUERTO CABELLO, *October 14, 1897.* *Consul.*

PRESERVATION OF EGGS.

The Berliner Markthallenzeitung reports about experiments made for the purpose of securing the most rational method of preserving eggs. This being a topic of general interest, I beg to give hereafter an extract of the results obtained, as described in the said journal.

Twenty methods were selected for these experiments. In the first days of July, four hundred fresh eggs were prepared according to these methods (twenty eggs for each method), to be opened for use at the end of the month of February.

Of course, a most essential point for the success of preservation is that only really fresh eggs be employed. As the most infallible means of ascertaining the age of the eggs the experimentist designated the specific weight of same. With fresh eggs, it is from 1.0784 to 1.0942. If the eggs are put into a solution of 120 grams (4.23 ounces) of common salt in 1 liter (1.0567 quarts) of water, the specific weight of which solution is 1.073, all the eggs that swim on this liquid weigh less, and consequently are not fresh. Only those eggs that sink should be used for preservation.

When, after eight months of preservation, the eggs were opened for use, the twenty different methods employed gave the most heterogeneous results:

(1) Eggs put for preservation in salt water were all bad (not rotten, but uneatable, the salt having penetrated into the eggs).

(2) Eggs wrapped in paper, 80 per cent bad.

(3) Eggs preserved in a solution of salicylic acid and glycerin, 80 per cent bad.

(4) Eggs rubbed with salt, 70 per cent bad.

(5) Eggs preserved in bran, 70 per cent bad.

(6) Eggs provided with a cover of paraffin, 70 per cent bad.

(7) Eggs varnished with a solution of glycerin and salicylic acid, 70 per cent bad.

(8) Eggs put in boiling water for twelve to fifteen seconds, 50 per cent bad.

(9) Eggs treated with a solution of alum, 50 per cent bad.

(10) Eggs put in a solution of salicylic acid, 50 per cent bad.

(11) Eggs varnished with water glass (Wasserglas), 40 per cent bad.

(12) Eggs varnished with collodion, 40 per cent bad.

(13) Eggs covered with lac, 40 per cent bad.

(14) Eggs varnished with sward, 20 per cent bad.

(15) Eggs preserved in ashes of wood, 20 per cent bad.

(16) Eggs treated with boric acid and water glass, 20 per cent bad.

(17) Eggs treated with manganate of potassa, 20 per cent bad.

(18) Eggs varnished with vaseline, all good.

(19) Eggs preserved in lime water, all good.

(20) Eggs preserved in a solution of water glass, all good.

The last three methods are consequently to be considered the best ones, and especially the preservation in a solution of water glass, as varnishing the eggs with vaseline takes too much time, and the treatment with lime water sometimes communicates to the eggs a disagreeable odor and taste.

There is, however, one drawback with eggs preserved in a solution of water glass, viz, that the shell easily bursts in boiling water; this may be avoided by cautiously piercing the shell with a strong needle.

J. H. THIERIOT,
Commercial Agent.

FREIBURG, *July 16, 1897.*

HOW TO WIN THE FOREIGN MARKET.

The question of supplying information to the manufacturers and exporters of the United States has grown to be such an important one, and the answering of the numerous inquiries as to the opportunities for the sale of American goods in the foreign market and the best methods for introducing the same, has come to involve such an enormous amount of letter writing that I am prompted to treat the subject in a general article to the Department of State, thinking that thereby a good deal of time and no small amount of money may be saved to the manufacturer and a vast amount of labor to the consular officer.

To simply refer the letters of inquiry and lists of questions to the foreign dealer, to distribute ever so carefully among the people the vast quantities of circulars and general advertising matter sent here by our manufacturers, or to furnish to them lists of names of the foreign agents and dealers in the various lines of trade—all this is more or less a waste of time and money.

In the first place, the letters, circulars, catalogues, etc., referred to are written or printed in English, and when they fall into the hands of the German dealers they very quickly reach the waste-paper basket.

Several months ago I sent to the Department a report* on the

* Printed in CONSULAR REPORTS No. 194 (November, 1896), p. 454.

opportunities for selling American bicycles in Bavaria. The article went the rounds of the newspapers in the United States and in a very short time I had letters from a large number of manufacturers and exporters asking for lists of names of bicycle dealers in my district. In reply, I sent them the names of all the responsible dealers I could find. After a few weeks I called on one of these dealers and inquired if he had ever received any communications from manufacturers of American wheels. He said, Yes, a whole armful; but as they were all in English, he could not read them, and had, therefore, consigned them to the scrap basket. This served to convince me of the folly of attempting to do business in a foreign country by correspondence, without at least putting that correspondence in the language of the country.

In the next place, agents secured solely through the medium of correspondence are not apt to be very valuable. While the foreign dealer will oftentimes consent to take the agency for American products, it is very seldom that he is found making any special effort to build up a trade in these goods. He carries a line of similar goods made at home, which he does not have to pay for until sold, whereas he must pay for the American goods before they are put on board in the American port, and the German does not take kindly to the practice of paying for goods before he has received or even seen them. Then, again, if he does strain a point and buy a few American goods, he fixes the price so high that the great majority of his customers can not afford to buy them. For example, a pound can of tomatoes put up by a packing house in Baltimore costs here 1.50 marks (36 cents), and a quart can of American peaches or pears, about 3 marks (nearly 75 cents). Even at these outrageously high prices a considerable quantity of these goods is sold here, but, of course, only to those persons who have plenty of money and know the superiority of American goods.

Now, the duty on this kind of goods is just 6 cents a pound and the freight is very light; therefore, when a dealer here sells a 1-pound can of tomatoes for 36 cents, he must be making a rather large profit. But the chances are that he buys his goods in London and it is the London agent that makes the profit.

Julius Freund, a commission merchant in Berlin, wrote to me some time ago, referring to an article of mine published in CONSULAR REPORTS on the "United States manufacturer and the German market." In his letter, he said:

> I am well aware of the fact that there are a vast number of practical articles in everyday use in the United States that are not to be had here for love or money. I have already sold a great many American carpets and rugs, which I bought of English commission houses.

Now, then, if American goods, after passing through two or three hands, can still be sold in this market at a profit, what might not be accomplished if these goods could be put on the market here direct from the hands of the manufacturer?

In the bicycle article, already referred to, I advised the American manufacturer who wanted to sell his wheels in this market to come himself or send a competent and reliable representative, bring his goods with him, and show them to the people. Some of them came, examined carefully the territory, picked out industrious agents, and to-day I know of at least half a dozen manufacturers of American bicycles that are selling their wheels in this market.

One year ago, there was not an American wheel in use here. Now, it is a very common thing to see on the streets and on the public thoroughfares throughout the country Cleveland, Eagle, Columbia, and other good American wheels, and the people are fully awakened to the fact that the American-made bicycle is far ahead of that made in Germany; and the manufacturers here are beginning to recognize this, for they are already urging the Government to increase the duty on American wheels to 50 marks ($11.90), but even this will not prevent their sale. The people will have them at any price within reason. And what is true of American wheels is true of many other articles of American manufacture, and the only reason why they are not in use here is because the people have no opportunity to buy them.

A little over a year ago a large manufacturer in the United States paid a business visit to this country, and I am now informed that, as a result of that visit, he is sending to Europe large quantities of his goods, doing a business which heretofore he had regarded as an impossibility.

If the American manufacturer will only take the trouble to go himself into the country where he seeks a market and where the conditions appear favorable and carefully look the ground over, the information he will gather, coupled with the knowledge he has of his own business, will enable him very soon to decide as to his chances and the course he ought to pursue. After an investigation of this kind, circulars and other advertising matter, especially printed in the language of the country, might be of some advantage.

It is almost impossible for the consular officer to do more than tell the story, furnish information as to the actual state or condition of things in the country with which he is familiar, and the manufacturer must then decide for himself as to the value of this information, and this he can do intelligently only by a personal inspection of the field. The consul can not act as agent; he can not keep a sample room of American-made goods, and the people always want

to see before they buy. Nor can he go out and hunt up agents for this or that company. He hasn't time for it; the business of the Government keeps him occupied. The man who seeks a consular position for the purpose of rest and recreation finds himself badly fooled.

As an example of the work attending an effort to induce a dealer here to take an agency or in any way change his line of business, I give the following: I felt that American-made furniture ought to be sold in this market, and I mentioned the matter to a large manufacturer of furniture here. I made use of all the arguments at my command, but he said it wouldn't pay; he would have to buy the goods, and, in all probability, the people would not want them, and he would always have them on his hands. All my efforts seemed to be futile; but I kept at work for more than a year, talked to him whenever opportunity offered, and called at his factory many times. One day, a few weeks ago, we chanced to meet on the street, when he surprised me by saying:

Well, I am in the American furniture business. I thought a good deal about what you said, and finally I ordered a few pieces, among others two roll-top solid-oak desks. They arrived yesterday, and before night I sold both the desks, and this morning I have ordered fifty more. I am going to stop manufacturing German furniture and put in a large stock of American goods.

This man's name is L. Schwarzenberger, and his address is Fürth, Bavaria. It took me more than a year to do this, but had a manufacturer of American furniture come here himself, he could undoubtedly have done the same work in a few hours.

A man who is now living in my district, but who formerly lived in the United States, a German-American, told me some time ago that he believed $1,000,000 worth of moldings could be sold in this section, and that if he were younger he would go into the business of importing moldings for door and window cases, picture frames, etc. Said he, there is scarcely a stick of timber in all this country fit for such purposes, and the machinery used is as bad as the lumber. So far as my observation goes, this is true.

The pine used in finishing the interior of a house would be considered in America totally unfit for such a purpose, and the prices for this lumber are very high. A picture frame made of this native pine hanging just over my desk cost 5 marks ($1.19). A frame of the same size in solid oak can be bought in America for 50 cents at the most.

I inquired of a large lumber merchant in Nuremberg, Leonhard Schaeff, why he did not buy American lumber; it was finer and much cheaper than that produced here. His answer was:

I would, but I have no opportunity. America is a long way off, and none of your people come here and offer their lumber for sale, and as I always like to know

or see what I am buying, I have to make out with what I can get in this section and the Tyrol.

These are a few hints or pointers for the American manufacturer who wants business and is willing to work for it.

HENRY C. CARPENTER,
Commercial Agent.

FÜRTH, *August 18, 1897.*

OUR FOREIGN TRADE METHODS AT FAULT.

I am constantly in receipt of letters, circulars, catalogues, prospectuses, and various other written or printed matter from manufacturers, merchants, agencies, export and import associations, business firms, etc., in regard to the introduction of their goods into this country. The greater part of this correspondence is accompanied by matter printed in the English language, setting forth the value and merits of the articles specified, and there are illustrations of much interest of many of the particular articles or parts of them which they offer.

The ingenuity displayed by the inventors, as seen in their illustrations; the adaptability of the manufactures to practical purposes; the variety of invention and beauty of style; the abundant supply of all conceivable articles needed in daily life; the convenience and comfort contributed to individuals, families, and communities; the increased facilities offered to business, communication, travel; the economics of labor—all these things and the information asked in connection therewith show a growing and increasing desire for wider markets and the need of new channels of trade.

The letters and other matter make it clear that our mines, forests, fields, the products of our varied climates—the tireless energy of American skill and labor, guided by the inventive genius of our people—are capable of supplying the demands of markets which have not before been opened. They have illimitable natural resources of raw material in their mines, forests, and fields, all at hand, with which to furnish every demand which can be made by modern civilization. The activity and industry of our workers in every department of life is proverbial and world-wide; the excellence of our products is admitted. Science goes hand in hand with labor; the chemist, the physicist, the mathematician, becomes the fellow-worker of our manufacturers and producers.

Machinery with our people seems endowed with their own marvelous energy, industry, skill, and intelligence, and performs miracles in civilization and human progress. The results of our American

methods are to give reduced cost and place comfort at every door. All these conditions and facts point to new relations, to new questions involving labor and capital, its new problems of supply and demand, and to new conditions of commerce and trade.

The correspondence spoken of in the beginning of this report is but the index of the power, the exponent of the restless desire of American energy to face the changing conditions and to meet and conquer them with American skill and courage. At present, this energy seems to be spasmodic in its efforts and appears to me to be only in process of evolution. The way to action has not yet been found. The channels are yet to be explored and mapped out. But the strong desire to extend commercial relations with foreign markets is already expressing itself in the intention to find the shortest route for our national activities. The modern civilization which they have so markedly and wonderfully contributed to create must open new fields for these active energies. Our national industries are ready and will soon supply other fields than those they now occupy. Forces are at work which will carve out new routes of commerce. All that is now needed, it seems to me, in view of the demands for information I receive, is concerted action and systematic effort—union of kindred interests guided by fixed plans and purposes and directed as by a common force—to secure a definite result in time. When that does occur, American industries will create wonderful changes in the world's commerce and in the world's problems.

But notwithstanding what may, and probably will, occur, as far as I can see by inquiries made and correspondence within my consular district, the concert of action and system is yet a matter for the future. Individuals, associations, firms, manufacturers, merchants, all appear to pursue their several and distinct courses. Even where great associations have begun to take up the problem, their methods do not appear to vary from those formerly used.

It has been the aim of consular officers to point out the inutility of certain methods and to advise a change in order to produce results. In former reports, I have alluded to the fact that those who desire to secure a market for their goods should pursue the methods used by those who actually control the desired markets. All the consular service has been urging the same line of procedure. The consular reports are ever pointing to the inutility of certain methods. It has been urged that what is needed to secure trade in the different markets of our own country is just as necessary, nay, more strongly needed abroad, to meet competition.

Our manufacturers and merchants at home have an army of trained, active, energetic men canvassing every city, town, village,

and hamlet in our country These commercial travelers are furnished with samples of the goods they would sell, or models of those they would introduce, or illustrations; they are sufficiently educated and intelligent to explain every matter which bears upon their special line of goods; they answer all questions and meet all objections with ready explanations; they explain the uses, needs, and workings of new machines or new goods, point out their economies, show their advantages and needs; they place goods, or samples, or models on exhibition, and invite scrutiny and examination; they introduce new inventions, hitherto unknown articles, by such sales or other arrangements as will secure recognition by the community to which they are offered; they are often willing to forego present commissions to secure future profits and future trade orders; they become acquainted with every dealer in their lines of goods, know his financial standing, secure his orders by their apt address and their ability to impress upon him the advantages of a bargain; they know every variety, style, and character of goods they offer, and are ready to make such changes in form, quantity, quality, color, style, or other requirement as may suit each community or which may accommodate the views of any client. The prices of each article are not only exactly quoted in the currency which the client comprehends, but every item of expense, including freight, commission, handling, packing, insurance, or other charge, is given for the actual delivery of the article to the customer; the times and conditions of credit such as are usual or customary in each community are arranged for and given. If competitors are bidding for trade in his line of goods, the commercial traveler is quick to meet the conditions. He has a specific territory, and he watches his clients, knows their needs, and never permits them to feel that another man will do better for them than himself. When he speaks of his goods, he uses terms which are familiar and comprehended by his customers; he gives all his information in the language of the people, according to their customs and in accordance with their known tastes; he recognizes that different portions of the same country have different needs and different tastes and ideas, and he uses his knowledge of these conditions for his own commercial benefit and for profitable trade; he leaves with all his clients, with the hotels, the chambers of commerce, and in every possible place of vantage his printed tariffs, descriptions, and other information, full of detail and all in the language which the people read and understand, and permits nothing to be done by interpretation or translation. Everything is so clear that "he who runs may read." He sends each order to his house with such specific instructions as may have been arranged to suit each transaction. If there are mistakes or errors of any kind in the filling of the orders, he corrects them at

once and never permits friction. In short, the commercial traveler is a power in the United States.

May I now ask what is done, or being done, or even thought of being done to counteract foreign commercial travelers abroad? What our manufacturers and merchants do at home, their foreign confrères practice equally in their own countries. Foreign houses are just as eager to control their own domestic trade as American houses are to secure business in the United States. Active and intelligent foreigners understand the conditions of trade in their own countries and foreign manufacturers are ready to supply the markets of their countries and to meet every demand of trade in every department by all the usual commercial methods. Commercial travelers are found pushing forward in every trade center and in all provinces. They know their routes and their clients as we know our own; they are acquainted with the needs, conditions, tastes, habits, requirements of their special territories; they explain the goods as their confrères in the United States explain theirs; they make friends, clients, and customers, and keep them as we do ours; they offer the facilities usual and customary. If they represent interests foreign to the special countries where they solicit trade, they speak the language of their customers, and give them all details in that language; they never offer explanations either oral or printed or give weights, measures, or prices in a language not read or understood by their customers; they offer the usual credits and facilities which prevail, and they know the commercial status of their clients, the varying tastes of communities, and the local needs; they are men of experience and judgment, having a clear knowledge of the laws of trade, the customs which govern it at home and abroad, and such ability and tact as enable them to seize every occasion for the advantage of their special trade; they are men with pleasant and engaging manners, who are able to meet social requirements and use the acquaintances thus made for substantial foundations of intercourse; they do not permit themselves to rush through a town; they explore it, know it and its people, and in turn are known and regarded with respect; they are supplied with such means as will enable them to return civilities, and to maintain positions as gentlemen worthy of the regard of the houses or firms or interests they represent; and by their various qualifications they become trade powers in the various communities within their territories. English, French, and German representatives and commercial agents and travelers are found exploring the world's markets at home and abroad, creating new ones and holding old ones. They want trade and they secure it. They have systematic plans, and pursue them with definite views and attain profitable results.

What are our great concerns who wish foreign trade doing in this respect? What do they intend to do? Can trade circulars in English or any other language meet these conditions? Could our home markets be secured by foreign houses, as against our active agencies to control them, by similar methods? If foreign trade is to be secured, in my judgment every agency which is employed by others must be used, and well used, by ourselves, or new and better methods must be found than those which prevail. In my opinion, it will be difficult to find a new method which will drive the intelligent and active commercial traveler from the field. As long as he remains, he must be met by rivals who wish trade. Circulars sent to consulates will not drive him away.

I have been shown, within the last few days, a commercial circular from a German house for use in trade in France. It was printed in French, not in German, and was so explicit in information that I was told of an order within the knowledge of the gentleman who showed it to me. The circulars and other documents sent from the United States to this country, wherever seen by me, are printed in English. Even then, do they give exact prices for actual delivery? Do they use terms of weight, measure, or price in the language of this country? I am sorry to say that all which come to my office are printed in a language and use terms quite unknown to this community or country, and which, in all probability, differ in no wise from those distributed in the cities or vicinities where the goods are manufactured or are on sale. Is it reasonable to suppose that they can influence foreign markets or dealers? A foreigner has no more time or inclination to devote to studying the descriptions of goods and their advantages written in English and expressed in unknown terms of measure, weight, or price than a commercial man in our country would have to give to such problems in a language and in terms quite unknown to him. How would busy men act in the United States? They act in the same way abroad. Why offer a foreigner a pamphlet or circular in English descriptive of goods you desire to sell him when he can buy what he wants or needs or what his business requires and what he knows will suit his trade from those who come directly to him, speak in his own language, explain all matters in familiar technical terms, and give him exact prices, weights, measures, and quantities in the only language which he and his customers employ. When every dealing is in French, why speak or write in English? A man is not so constituted as to make mere experiments in trade, especially when those experiments involve departure from customs firmly established for ages and which are presented under conditions totally unknown, where at best he considers himself as taking all the risk? Is it reasonable to suppose

that a dealer in one of our States, when buying goods, would depart from his usual well-known paths of safe profit in trade because some one not known to him had sent him a description of a meritorious article produced in a European country—an article which he had heretofore bought at home with satisfaction to himself—described in a language totally unknown to him, without even offering such exact prices or figures for actual delivery as he could comprehend?

When such circulars and other printed matter are issued in the language of the country where trade is sought and in accordance with the usual custom, to be effective they must have the aid and influence of all those other agencies of commerce which are usual. Here the commercial traveler becomes of special importance to supplement such circulars, etc. The two must go hand in hand; they must together enter the house of every dealer whose trade is desired. The circulars, even when thoroughly correct and in accordance with customs and requirements, must have the support of the commercial representative. At present, as far as my experience goes, a simple circular or trade pamphlet in English, sent to the consulate, seems to be considered as the only means necessary. Is it thus we can combat the agencies of other countries who neglect no known business methods to secure trade?

In the United States, advertisement has its specific functions in creating trade. The manufacturer, merchant, or producer who desires to extend his trade or to introduce his goods into different parts of our country, fully appreciates the importance of this agency. Enormous sums are spent in introducing new articles through proper advertisements in the United States. The results have always been so gratifying that our country reaps the rewards of industry and holds its home markets by judicious advertising. It seems to be admitted by commercial men that no expenditure is more certain to extend their business than proper and wise advertising. It is said that many fortunes in business have been thus acquired; many instances of success are familiar. Manufacturers and merchants abroad employ this agency; doubtless they find it to their own advantage. If our commerce is to be largely extended into foreign countries, it seems to me that the agencies which the foreigner employs to secure and hold the trade of his own country are quite as necessary on the part of those who would share their markets with them. I do not suggest methods; I only mention conditions. I do not think the products or manufactures of other countries would find an easy entrance into our own home markets without being brought to public attention in the same way as our own are.

There is great conservatism in trade. The usual channels are those to which we all turn and by which our actions are greatly

guided. The journal which the public reads abroad is a means of introduction to that public for all wares which can be judiciously advertised. The laws of trade are as unchangeable as those of the Medes and Persians. What is needed abroad, just as well as at home, is to let the world know you have something it wants and that your article is as good or better than can be gotten elsewhere, and that you will sell it cheaper than any one else, or that it is so much superior in quality that it would be cheaper in the end to pay as much or perhaps more for your article. How is this to be done? The question is very quickly answered when one searches the columns of our home papers. If it pays at home, why will it not pay under judicious conditions abroad?

There are other factors for the aid of commerce than those already mentioned which need only to be alluded to, such as the business correspondent, the commission merchant, the commercial agent, the shipping broker, the bank, and the chamber of commerce, etc. Those who employ these agencies or those already mentioned, or such of them as they deem proper, know the advantages which such connections give in their trade relations. Those who rely on other methods than such as are usual in commercial affairs at home doubtless know best how to advance their own interests. I can only say that the well-marked channels and agencies of trade which experience and judgment have ever approved as wise in our own country are employed with equal wisdom in foreign countries. Through such agencies, mutual interests are established which are necessary for many, if not most, of the elements of success. Through them, the needs and conditions of the markets, the prices, the names of dealers and their financial standing are known. If agents are desired to handle goods, then the commercial agency or the bank or the trusted correspondent can recommend suitable or reliable men and guarantee their financial responsibility. In short, those who have foreign trade employ the same methods as they use in their home trade.

As to particular methods for extending trade abroad, aside from those already alluded to, I am convinced that, to meet competition, kindred interests of trade or manufacture which are naturally allied should combine and act together. Such combined kindred or allied interests should establish in metropolitan cities of particular countries commercial houses where all their wares could be shown, handled, and brought into the actual market, using and employing all those methods of trade already mentioned which are usual or common in the said countries. When this step is taken, they would have laid, in my opinion, the surest foundations for success in foreign commerce. Such houses would employ all those active agencies which have been

found wise, proper, or necessary by the experience of trade in the country of location. Such a house would identify itself with those local influences and commercial powers which would be deemed important. It would ally itself with many native interests and influences which would tend to solidify its local connections, and soon it would merge its foreign aspect into the general interests and prosperity of its locality. It would call into its service many intelligent, influential, and energetic persons of the country, and would make itself a welcome part of the general prosperity of the country whose protection it enjoys. It would be a center of influence and information, which would soon widen and strengthen the current of its own trade and that between the two countries. In time, such a house, wisely and prudently managed for the combined interests which it represented, would be able to extend its trade as native houses do, and would find it necessary to establish other houses or agencies in different parts of the country. Increase of trade would be its object, and it would find new markets. It would interest other houses of the country in different provinces or cities in handling its various wares and goods. Such conditions and alliances would develop higher and stronger relations of trade. If there is strength in unity of action or wisdom in council, special self interests would find their highest rewards in general good, and such combined kindred interests and efforts united under one management could act with hope of permanent success. They could meet competition on its own ground and secure foreign trade. Such houses, acting directly for the several interests represented, and as agents for other interests not connected with them directly, would become well known throughout the country and would soon react upon our own home industries. Their demands in their foreign trade would certainly create new conditions at home and give impetus to manufacturers which would be felt in every branch of trade. Their success would point the way to new enterprises and promote new commercial relations at home and abroad.

One more suggestion in this direction is ventured, viz, separate interests which desire as individuals to extend their foreign trade and which would not connect themselves with such federated houses as suggested, could, in my opinion, best serve their wishes by creating general agencies in the metropolis or in great business centers of the particular foreign country. As their trade developed or increased through such agency, and as occasion demanded or circumstances warranted, subagencies could be created. It must be remembered, however, that to insure success there should ever be such liberal mutuality of interests as would tend to produce desired results.

It is a difficult matter to turn the current of a stream from its

usual and natural course. The laws of trade can not be changed; we must accommodate ourselves to them. Nothing is more certain than that the currents of trade can not be turned into new channels without efforts proportional to the resistance which is to be overcome. When once the volume has assumed great proportions, it pours on irresistibly through its own self-made channel, being deflected at times in slight ways, or even at times permitting small streams to flow as backwater; but these deflected currents and streams either end in stagnation and marshes or they find means to reunite with the great volume in its onward course and finally reach the same outlet. If, then, we would partake of the trade of a country, we should identify ourselves with its methods, its self-wrought channels, uniting our force with its ever-constant force and volume, and becoming so completely identified with the current as to reach the same general prosperity of the people in their progress. All efforts to leave the great current of trade will end in stagnation, unless we return to the usual channel by which fertilizing prosperity leaves wealth in its course. The methods which give success at home are those which we should employ abroad, modified by the differences due to nationality and the resulting conditions.

In conclusion, I would respectfully beg to say that the matters on which I have dwelt in the foregoing report are only intended as suggestions to be used and elaborated for the benefit of those interests which are seeking to extend our national wealth and power abroad. Consuls can not create trade, as I remarked in a former report; but they must find their best opportunities of service in their faithful efforts to point to conditions as they see them. Individual efforts, guided by their own interests, pursuing their own methods and plans, looking forward to definite and objective points, dominated by energy, perseverance, and industry only can accomplish such a creation. It is for them to say, Let there be trade. When they speak, I have deep and abiding faith in American ability to accomplish all objects and overcome all difficulties. And now that our countrymen are seeking foreign trade, there is a certainty that they will find the way to obtain their end in the fullest measure desired.

WILBURN B. HALL,
Consul.

NICE, *June 23, 1897.*

NEW TARIFF OF CUBA.

Following is a translation, made by W. C. Mayo, of the Department of State, of the customs tariff for the island of Cuba, promulgated by the Spanish Government and printed in the Gaceta de Habana of September 9, 1897:

FIRST PROVISION.—GENERAL CUSTOMS SYSTEM.

I. DUTIES ON MERCHANDISE.

Foreign goods, and domestic goods not possessing the requisite qualifications under the present provisions entitling them to the benefit of rebate of duty, shall pay, upon their importation into the ports of Cuba, the sum of the discriminating and revenue duties fixed in each number in the columns of this tariff.

Domestic merchandise possessing such qualifications shall pay, upon its importation into the ports of the island of Cuba, the duty designated in the revenue column.

The rebate (protection) provided by the discriminating (differential) duty shall not apply in any case to foreign products, even when they have been nationalized by the payment of customs duties in other Spanish provinces or possessions.

Goods of domestic produce and origin shall be subject to the taxes on loading and unloading and on consumption and to all taxes and excises generally that may be established, provided that they are the same for all articles, wherever produced and of whatever origin.

Domestic products shall not, in any case or under any circumstances, enjoy less advantages in the custom-houses of the island of Cuba than similar foreign products. They shall enjoy, ipso facto, such exemption or rebate of duty, excise, tax, or charge of any kind as may be enjoyed by any similar foreign product when imported into the island of Cuba.

II. DISCRIMINATING DUTIES.

The duties designated in the differential column constitute the protection given to domestic articles. Consequently, these duties are laid, as a minimum and equally, on all goods coming from abroad, and are not applied to domestic products of direct domestic origin carried under the Spanish flag.

By "domestic products" are meant, within the purview of this tariff, the products of the agriculture, industries, arts, and trades carried on in the Spanish provinces or possessions.

By "Spanish vessel" is meant a vessel having the papers required by the ordinances and regulations in force.

By "direct domestic origin" is meant the origin of domestic goods carried in vessels which have shipped them in Spanish ports and which carry them to the ports of their destination in the island of Cuba without touching at any foreign port during the passage.

Domestic goods shall retain the benefit of direct origin in the following cases:

(1) When the vessel enters a foreign port under compulsion, without performing any commercial operations of loading or unloading.

(2) When the vessel, owing to damages or accidents of the sea, is compelled to transship the goods to forward them to their destination.

(3) When the domestic goods have been transshipped during the voyage, provided that the transshipment has been from one Spanish vessel to another and has taken place in a Spanish port.

The compulsory arrivals, the entrances into ports, or the transshipments, attended by the circumstances constituting the above cases of assimilation to direct orlgin, shall be proved by a certificate in due form issued by the competent authorities, such as the consuls of Spain at the foreign ports where there are any.

In order that domestic goods of direct origin may obtain the benefit of the discriminating duties. they must be shipped at domestic ports with the following formalities:

(1) The shipment shall be made either directly by the domestic producer or through a merchant, agent, or some person acting as his legal representative.

(2) By "producer" shall be understood a manufacturer, industrial, or farmer exporting articles which he has produced or which have been altered in factories or workshops belonging to him.

(3) By "merchant" shall be understood, within the meaning of this provision, one who has been registered as such; and, in the case of the products of the peninsula and the adjacent islands, one who has been registered as an exporting merchant; and, in both cases, the customs authorities of the ports where the goods are shipped shall certify the registration of the exporter in the proper register.

For exporting merchants of the Basque Provinces, it shall be sufficient for the customs authorities to certify upon the invoices that the exporters have paid the dues required of merchants in the respective localities by the provincial deputations.

(4) If the producer is himself the exporter, he shall state in his declaration the place of his manufactory, workshop, shop, etc., and shall declare that the articles which he is exporting were manufactured or raised by himself.

When an exporter of domestic goods is a registered merchant, he shall furnish an invoice signed by the producer, stating, upon his own (the producer's) guaranty, that the articles enumerated in it were manufactured or raised by himself, and the said invoice shall state where the manufactory, workshop, shop, etc., is situated.

The said invoice shall serve as a voucher and guaranty of the declaration which the exporters, in their turn, shall make in the permit of shipment.

(5) In order to prove that the articles shipped for the island of Cuba are of domestic production, they must bear, in the proper cases, the custom-house mark or the trade-mark.

In the case of textile fabrics of domestic production, the net weight and the quantity of each piece, and, where the duty depends on the number of threads, the number of threads in the fabric shall be stated; and if the fabrics are mixed, the various materials of which the stuff is composed and the number and proportion of threads in each material composing it shall be stated.

Foreign stuffs imported in a rough state and merely bleached or printed in the domestic factories shall not be declared as stuffs of domestic production.

(6) Domestic goods or products shall not be shipped in the same package with foreign goods or products.

(7) Exporting merchants and producers, when they are the exporters, shall keep two books, as required by article 36 of the commercial code—one of registers of the invoices or certificates of the producer, in which he declares that the articles enumerated in the said documents are of his manufacture, industry, or production; and another, a copying book of invoices of shipments, in which he shall enter the name of the vessel carrying the goods, and the number, class, marks, and gross weight of the packages, and, where necessary, the other data required by the foregoing regulation.

These books shall be always at the disposal of the administration, in order to enable it to make such investigations as it may deem expedient.

No exception shall be made in the way of exemption or rebate of the duties in the discriminating column in favor of any industry, person, or importing firm or corporation, except by legislative enactment.

III. REVENUE DUTIES.

The duties affixed in the revenue column to the products contained in the items of the tariff shall not be discriminating. They shall apply equally to goods of whatever origin, including domestic goods.

No exemption or rebate of these duties shall be granted in favor of any industry, person, or importing firm or corporation.

SECOND PROVISION.—RECIPROCITY; CONVENTIONAL REGULATIONS.

I. RECIPROCITY.

The Government may decree a special addition of 30 per cent to all the customs duties on imports into Cuba for the products of any nation which, in its customs laws or in the application of its general or special tariffs, may cause injury to Spanish products by subjecting them to a discriminating treatment.

The Government shall decree such addition, in the custom-houses of the island of Cuba, in the case of the products of any nation subjecting the products of the island of Cuba to injurious discriminating treatment in its custom-houses. In such case, the council of administration may suggest that such special addition be increased in the case of the products in question to 60 per cent of all the customs duties paid in the custom-houses of the island of Cuba by similar products of other foreign nations.

II. COMMERCIAL TREATIES AND CONVENTIONS.

The commercial treaties and conventions affecting the customs duties of the island of Cuba shall be special. Neither the treatment of the most-favored nation nor the benefit of any clause having the like effect shall be granted by them to any foreign product.

The special advantages of exemption, rebate, or consolidation of customs duties granted by commercial treaties or conventions shall be understood to be granted, unless otherwise specified, to goods of the direct origin of the foreign nation with which the treaty is made, "direct origin" being understood to mean the origin of goods brought in vessels which have not touched at any port of any other foreign nation from their departure from the port of origin of the goods to their arrival at their port of destination in the island of Cuba.

Foreign goods shall retain the benefit of the advantages enjoyed by direct origin in the following cases:

(1) When the vessels carrying the goods enter the ports of another foreign nation as a matter of necessity, without performing any mercantile operations of loading or unloading.

(2) When the vessel carrying the goods is compelled, owing to damages or accidents of the sea, to transship the goods in order to have them forwarded to their destination.

(3) When the goods pass through another country in transitu.

(4) When the vessels carrying the goods touch, during the voyage, at the ports of another foreign nation, even if they perform mercantile operations there, or transship to other vessels the cargo destined for the island of Cuba, provided the goods are consigned to that island from their port of origin and that it so appears from the manifest made out at the said first port of shipment.

The compulsory arrivals, entrances into ports, transshipments, transit, consignment to the island of Cuba by direct bill of lading from the port of origin of the goods, and other circumstances constituting the cases of assimilation enumerated must be proved by a certificate in due form issued by the competent authorities, such as the consuls of Spain at those points where there are any.

III. CERTIFICATES OF ORIGIN.

The Ministry of the Colonies may order in the case of articles included in any of the items of the tariff of imports, the exhibition of a certificate of origin of foreign goods where such certificate is necessary in order to obtain exemption from the special additional duty decreed for products of a certain origin, or to obtain the treatment of special favor granted by treaty to products of a certain origin.

The certificates of origin shall be presented in such cases in the form and in accordance with the regulations respectively decreed or agreed upon.

THIRD PROVISION.—ARTICLES ADMITTED FREE OF DUTY.

The following articles shall be admitted into the island of Cuba free from customs duties upon the conditions stated and upon the fulfillment of the formalities required in each case by the custom-house ordinances:

(1) Natural manure.

(2) Trees, plants, and natural or fresh moss.

(3) Domestic articles returned from foreign exhibitions, upon the presentation of the permit or invoice of shipment from the island and the certificate of the Spanish consul in the country in which the exhibition was held that the said articles were exhibited and were shipped to be returned to the island.

(4) Submarine telegraph cables.

(5) Carriages, trained animals, portable theaters, panoramas, wax figures, and other similar articles for public shows, imported temporarily, to be taken out of the island afterwards, upon furnishing security (that they will be taken out of the island).

6. Vessels (jars, etc.) which have left the island with fruits, sugars, honey, or brandy, and which are reimported empty, including the so-called "pipotes" (kegs) of galvanized iron for the exportation of alcohol.

(7) Barrels and bottles of common glass of domestic manufacture intended to contain alcohol, brandy, liquor, wines, beer, or cider of domestic manufacture.

(8) Specimens and collections of mineralogy, botany, and zoology; and models in small pieces for public museums, institutions of learning, scientific and artistic academies, and corporations, upon proof of their destination.

(9) Furniture in use belonging to persons coming from the peninsula (Spain) or Spanish provinces or possessions who are returning to the island or who intend to settle there.

(10) Samples of felt, painted paper, and textile fabrics of the following dimensions and qualities:

(*a*) They must not be more than 40 centimeters in length, measuring along the warp of the fabrics. They may be as wide as the whole piece, and the width of the fabrics shall be measured on the selvage, and that of the felt or painted paper, on the narrow margin left unstamped.

(*b*) Samples varying from this description shall be admitted free of duty only when they do not exceed 40 centimeters either in length or breadth.

(*c*) To prevent fraud, only such samples shall be admitted free of duty as, when presented at the custom-house by the parties concerned, have been rendered useless by means of cuts made in them at intervals of 20 centimeters in the direction of their length.

(11) Samples of passementerie in small pieces without any commercial value.

(12) Archæological and numismatical articles intended for public museums or scientific or artistic academies or corporations, upon proof of their destination.

(13) Works of the fine arts executed by Spaniards and such as have been acquired by the Government, academies, or other official corporation for museums, galleries, or halls of study, upon proof of the fact.

(14) Gold in bars, dust, or coin and silver or copper coins of domestic coinage.

(15) Jewels, articles of comfort and convenience, bed and table linen, books, tools, and portable implements (instruments), theatrical costumes, ornaments, and plate, which, having the appearance of having been in use, are carried by travelers in their baggage in quantities befitting their class, profession, and circumstances.

When travelers have not their baggage with them, the baggage may be cleared by the carriers or other persons possessing the necessary authority, provided that, in the opinion of the administration, it is proved that the articles are intended for private use.

(16) Rosaries, shrines, and other similar articles from the holy places imported by the administration of the "Obra Pia" (pious work) of Jerusalem, when the Ministry of the Colonies has given orders for their free circulation.

FOURTH PROVISION.—APPRAISEMENT OF TEXTILE FABRICS.*

GENERAL RULES.

By the number of threads in the fabric, unless otherwise stated, shall be understood half the sum of the threads contained in the warp and the woof of the fabric in question in a square of 6 millimeters. If the quotient of the division of such sum by 2 contains a fraction, such fraction shall be counted as an entire thread.

To determine the number of threads, for the purpose of ascertaining the duty to be paid by the fabric, and to determine, likewise for the purpose of ascertaining the duty, the proportion in which the threads of superior class occur in mixed fabrics, the instrument called "thread counter" shall be used when necessary.†

When there is any doubt as to the number of threads in a fabric, owing to the threads being closer together in some parts than in others, the two places of greatest and least closeness, respectively, shall be selected, and the average of the result of both counts shall be taken for the appraisement.

The threads shall be counted on the right side of the fabric, whenever its character permits.

In the case of fabrics having a nap, and, generally, in the case of those upon which the nap has been brought out by means of carding or fulling, the threads shall be counted on the wrong side of the fabric, after scraping or burning away the nap in cases where it is necessary.

In the exceptional cases of fabrics in which the number of threads still remains doubtful after this is done, a sufficiently large piece of the fabric shall be unraveled. When this is impossible, as, for instance, in the case of articles which have been made up, the fabric shall pay the highest duty in the group to which it belongs; and if it is a mixed fabric, it shall be assessed as of the class to which that material of the mixture paying the highest duty belongs.

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* By the warp of a fabric is meant the combination of threads extending in the direction of the length of the fabric, whether they form the ground or whether they are added to form figures on the face, or to give it greater thickness; by woof is meant the combination of threads extending in the direction of the width of the fabric, whether or not they help to form figures or to increase the thickness.

† The ruler used to determine directly the proportion in which the threads of superior class occur in a mixed fabric is described in a special instruction annexed to the tariff (Appendix II).

Whenever the importer is dissatisfied with the result of the investigation or examination, a sufficiently large sample of the fabric shall be attached to the protest or appeal which he presents and shall remain attached to the papers in the case; and a note signed by the director of the custom-house, the inspector or officer who has made the count or examination, and the party interested shall be attached to the said sample.

DUTIES ON MIXED FABRICS.

Textile fabrics of all classes composed of two materials shall be assessed as follows:

A. Cotton fabrics containing threads of hemp, jute, flax, ramie, or other vegetable fibers shall be assessed in accordance with the items of the second group of Class IV, with the additional duty levied upon them,* provided that the number of the threads of hemp, jute, flax, ramie, or other vegetable fibers, counted in the warp and woof, does not exceed the fifth part of the total number of threads composing the fabric.

If the number of the threads of hemp, jute, flax, ramie, etc., exceeds the fifth part of the whole number of threads, the fabrics shall be assessed in accordance with the corresponding items of Class V.

B. Cotton fabrics containing threads of wool, wool flock, hair, or waste of those substances shall be assessed in accordance with the second group of Class IV, with the additional duty levied upon them,* provided that the number of the threads of wool, wool flock, hair, or waste, counted in the warp and woof, does not exceed the fifth part of the whole number of threads of which the fabric is composed.

If the number of the threads of wool, wool flock, hair, or waste exceeds the fifth part of the whole, the fabrics shall be assessed in accordance with the corresponding items of Class VI as mixed woolen fabrics.

C. Cotton fabrics containing threads of silk or flock silk shall be assessed in accordance with the items of the second group of Class IV, with the additional duty levied upon them,* provided that the number of the threads of silk or flock silk, counted in the warp and woof, does not exceed the fifth part of the whole number of threads of which the fabric is composed.

If the number of threads of silk or flock silk exceeds the fifth part of the whole, the fabrics shall be assessed in accordance with the corresponding items of Class VII.

D. Fabrics of hemp, jute, flax, ramie, or other vegetable fibers containing threads of wool, flock wool, hair, or of waste of those substances, shall be assessed in accordance with the items of the second group of Class V, with the additional duty levied upon them,† provided that the number of threads of wool, flock wool, hair, or waste, counted in the warp and woof does not exceed the fifth part of the whole number of the threads of which the fabric is composed.

If the number of threads of wool, flock wool, hair, or waste exceeds the fifth part of the whole, the fabrics shall be assessed in accordance with the corresponding items of the second group of Class VI as mixed woolen fabrics.

E. Fabrics of hemp, jute, flax, ramie, or other vegetable fibers containing threads of silk or flock silk shall be assessed in accordance with the items of the second group of Class V, with the additional duty levied upon them,† provided that the number of threads of silk or flock silk counted in the warp and woof does not exceed the fifth part of the whole number of threads of which the fabric is composed.

If the number of threads of silk or flock silk exceeds the fifth part of the whole, the fabrics shall be assessed in accordance with the corresponding items of Class VII.

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*Class IV, group 2, Note I. †Class V, group 2, Note I.

F. Fabrics of wool, flock wool, or hair containing threads of silk or flock silk shall be assessed in accordance with the items of group 2 of Class VI, with the additional duty levied upon them,* provided that the number of threads of silk or flock silk does not exceed the fifth part of the whole number of threads of which the fabric is composed.

If the number of threads of silk or flock silk exceeds the fifth part of the whole, the fabrics shall be assessed in accordance with the corresponding items of Class VII.

Fabrics composed of more than two materials shall be assessed as follows:

A. Mixed fabrics of wool and cotton or of wool and other vegetable fibers containing at the same time threads of silk or flock silk shall be assessed in accordance with the corresponding items of Class VI as mixed woolen fabrics, in whatever proportion the threads of vegetable fibers occur; and the additional duty for threads of silk or flock silk shall be levied upon them, provided the number of such threads, counted in the warp and woof, does not exceed the fifth part of the whole number of threads of which the fabric is composed.

If the number of the threads of silk or flock silk exceeds the fifth part of the whole, the fabrics shall be assessed in accordance with the corresponding items of Class VII.

B. Mixed fabrics of cotton and other vegetable fibers containing at the same time threads of silk or flock silk shall be assessed in accordance with the corresponding items of Class V in the same way as fabrics of jute, hemp, etc., whatever be the proportion of cotton threads; and the additional duty for threads of silk or flock silk shall be levied on them, provided the number of such threads, counted in the warp and woof, does not exceed the fifth part of the whole number of threads of which the fabric is composed.

If the number of the threads of silk or flock silk exceeds the fifth part of the whole, the fabrics shall be assessed in accordance with the corresponding items of Class VII.

C. Mixed fabrics of wool and cotton and other vegetable fibers not containing silk threads shall be assessed in accordance with the items of Class V, with the additional duty for woolen threads, provided the number of such threads, counted in the warp and woof, does not exceed the fifth part of the whole number of which the fabric is composed.

If the number of woolen threads exceeds the fifth part, the fabrics shall be assessed in accordance with the corresponding items of Class V as mixed woolen fabrics.

All fabrics containing threads of silk or flock silk, the number of which, counted in the warp and woof, exceeds the fifth part and does not exceed the half of the whole number of threads of which the fabric is composed, shall be considered mixed silk fabrics.

If the number of the threads of silk or flock silk, counted in the warp and woof, exceeds the half of the whole number of threads in the fabric, it shall be regarded and assessed as a silk fabric without mixture.

EXCEPTIONS.

Mixtures in knit fabrics, in tulles, lace, blondes, and edgings and in ribbons are excepted from the foregoing rules in the following cases:

Knit fabrics of all kinds and tulles, laces, blondes, and edgings of all kinds shall be assessed, when they are of mixed materials, in accordance with the corresponding items of the class to which the threads of the materials paying the highest duty belong, in whatever proportion such threads occur in the fabric.

* Class VI, group 2, Note I.

The knit fabrics and the laces, blondes, and edgings assessed under Class VII shall be regarded as mixed silk fabrics, provided that they contain threads of cotton or other vegetable fibers or of wool or flock wool, whatever be the proportion of such threads in the mixture.

Tulle of less than 15 centimeters in width shall be regarded as edgings.

Ribbons and galloons composed of a mixture of cotton and other vegetable fibers or of vegetable fibers and wool, and not containing silk, shall be assessed in accordance with the corresponding item of the class to which the threads paying the highest duty belong.

Ribbons and galloons containing silk in any proportion shall be assessed in accordance with the corresponding items of Class VII as textile fabrics. Those not exceeding 15 centimeters in width shall be regarded as mixed silk fabrics, provided they contain in any proportion threads of cotton or other vegetable fibers or of wool or flock wool.

Passementerie shall be assessed by its whole weight, as if it were composed exclusively of the apparent or visible textile material.

Passementerie composed in its apparent or visible part of various textile materials shall be assessed for its whole weight in accordance with the item and class of the material paying the highest duty. If threads of metal of any kind prevail in its composition, it shall be assessed under Class VII, with the additional duty assessed upon the metal.

Passementerie is distinguished from ribbons and galloons in that the latter are genuine textile fabrics with woof and warp, whereas articles of passementerie are braided (platted).

ADDITIONAL DUTIES.

The additional duties levied in the case of brocades, embroideries, metal threads or manufacture shall always be calculated upon the duties assessed upon the fabric, making allowance (where such increase occurs) for the increase of such duties on account of mixture.

In calculating the whole duty to be paid by an article, the additional duties levied in each of the cases above mentioned shall be added, according to circumstances.

Fabrics brocaded or raised with silk or flock silk shall pay the additional duties elsewhere provided.*

By "brocaded or flowered fabric" is meant one having flowers or other ornaments woven upon it, made by means of the small shuttle called an "espolin," in such a manner that the threads do not occupy the whole width of the stuff, but only the space covered by the flower or figure.

Fabrics embroidered by hand, or by any machine except the loom, or having passementerie worked upon them, shall pay the additional duties provided for such cases,† and according to whether the embroidery contains metal threads or not.

Embroideries are distinguished from figures worked upon the fabric by the fact that the worked figures can be removed by unraveling the woof of the fabric, whereas the embroidery is independent of the warp and the woof, and can not be unraveled.

Fabrics and passementerie containing, in any proportion, metal threads shall pay the additional duties provided in such cases.‡

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*Classes IV, V, and VI, group 2, Note II, Letter A.

†Classes IV, V, and VI, group 2, Note II, Letter B; and Class VII, group 2, Note II, Letter A.

‡Classes IV, V, and VI, group 2, Note II, Letter C; and Class VII, group 2, Note II, Letter B.

Fabrics composed exclusively of metal threads shall be assessed under Class VII and shall pay the additional duty assessed upon the metal.

Fabrics made up into any kind of object or article shall pay the additional duties provided in such cases.*

Wearing apparel, ornaments of dress of all classes and forms, and, generally, all articles of millinery or tailor work shall pay for their entire weight the duties assessed upon the fabric of which the article is chiefly composed in its most visible external part.

Ornaments or articles half finished or basted shall be regarded as made up and as wearing apparel, so far as to subject them to the additional duty in each case.

FIFTH PROVISION.—RULES FOR THE ASSESSMENT OF GOODS NOT EXPRESSLY LISTED IN THE TARIFF AND OF ARTICLES COMPOSED OF DIFFERENT MATERIALS.

(1) Articles not mentioned in the tariff shall be regarded as assimilated, for the assessment of duties, to those to which they bear the greatest resemblance.

When any article not listed in the tariff and not mentioned in the index (repertorio), and the similarity of which to any of the articles specified in the items of the tariff is doubtful, the party interested or the importer may request the administration to designate the item in accordance with which the assessment is to be made. In such case, the goods shall be assessed in accordance with the item designated by the director of the custom-house.

Immediately afterwards, even if the party interested is satisfied with the assessment, the administration of the custom-house shall refer its decision, to wit, the designation of the item, to the Ministry of the Colonies, through the intendancy of finance, sending with it, when possible, a sample of the goods in question and giving its reasons for its opinion.

The Ministry of the Colonies shall confirm the designation of the item by royal order or shall render such a decision as may serve as a guide in future. In the first case, an addition shall be made to the index in accordance with the designation of the item which has been confirmed.

When the royal order designates a different item from the one designated by the administration of the custom-house, a new assessment shall be made, provided the party interested or the importer has appealed from the assessment.

(2) Articles which, owing to their nature and use, are composed of two or more different materials or parts,† shall be assessed upon their whole weight, in accordance with the corresponding item of the material which chiefly determines the value of the article.

(3) In the case of doubt as to which of the materials of which an article is composed is that which chiefly determines its value, the assessment shall be made in accordance with the corresponding item of the material paying the highest duty.

(4) If the mixture of different materials has been made for the purpose of evading the duties on a certain item, the duties assessed upon the article paying the highest duty shall be levied.

SIXTH PROVISION.—RULES FOR THE ASSESSMENT OF VESSELS (JARS, BOTTLES, ETC.) AND TARE.

(1) Vessels which can be used again for other purposes shall pay the duties affixed to that item of the tariff under which they are classed, provided they are not expressly included in the assessment of goods which are assessed upon the gross weight.

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*Class IV, V, and VI, group 2, Note II, Letter D; and Class VII, group 2, Note II, Letter C.

†As, for instance, the handle and steel of a tool, the glass and frame of a mirror.

(2) Vessels paying higher duties than the goods contained in them shall always pay the duties annexed to that item of the tariff under which they are classed.

(3) The following articles shall be assessed upon the gross weight, including all the vessels or boxes containing them:

Of Class I.—Marbles, jasper, and alabaster in the rough or in slabs or steps; other natural stones and artificial stones not dressed and in slabs or steps; earths employed in the industries and arts, cement, lime, and plaster; mineral coals and coke; mineral tar and pitch, asphalt, bitumen, and schist; mineral oils of all kinds; minerals; clay in rough articles for building, furnaces, etc., and articles of fireproof clay; clay, cement, and sandstone in paving slabs, paving tiles, tiles, varnished tiles, and pipes.

Of Class II.—All articles of cast or wrought iron or of steel belonging to groups 2 and 3 of the class (except those included in items 30, 31, 38, 41, 43, letters *b* and *c*, 44, 45, 46, 47, 48, 49, 50, letters *b*, *c*, and *d*, 51, 52, and 53); copper sheathing, copper of the first melting, and old copper, brass, etc.; copper, brass, bronze, and other alloys of common metals containing copper, in pigs, bars, plates, pipes, pillow blocks, plates for hearths, and pieces of unfinished copper work; quicksilver or mercury; nickel, aluminium, tin, zinc, lead, or other metals not specified in the tariff, and all alloys of the same, in cakes, pigs, bars, plates, pipes, or wire; iron or steel filings, parings, and shavings and other waste of common metals; dross.

Of Class III.—Oleaginous seeds, including the pith of the cocoanut; resins (except turpentine) and the gums included in item 80; extract of licorice, camphor, aloes, and other similar vegetable juices; tan bark; opium; products of the vegetable and animal kingdoms included in items 84 and 85; natural colors, powdered or in the lump; natural dyes; bitumen; the chemical products included in items 93 (except phosphorus), 94, 95, 96, 97, and 98, letter *a;* vegetable oils included in item 103; animal oils and fats in the natural state; unmanufactured wax and paraffin in cakes; fertilizers; glue, albumen, and gelatin; carbon for electric lights.

Of Classes IV, V, VI, and VII.—Textile materials of all kinds in the raw state, not spun or twisted.

Of Class VIII.—Paper pulp.

Of Class IX.—Staves; common wood in boards, planks, etc., planed or grooved boards for boxes or floors; fine woods for joiners' work in boards, planks, blocks, or pieces; staves and headings, put together or not, and shooks for hogsheads, tierces, and barrels; railings or fences; coal, wood, and other vegetable combustibles; cork in the rough or in cuts; rushes, vegetable hair, osier, fine straw, palm, broom straw, and feather grass in the rough state.

Of Class X.—Ornamental furs, untanned skins, skins tanned with the hair on, and skins tanned without the hair, included in item 213; refuse.

Of Class XI.—All the articles included in group 2.

Of Class XII.—Hung beef; fish, fresh, salted, smoked, and pickled; oysters of all kinds and dried or fresh shellfish; rice in bags; wheat and other cereals; flour of all kinds in bags; dried vegetables; garden stuff and fresh vegetables; carobs and seeds not specified; fodder and mill feed.

Of Class XIII.—Tarpaulins (encerados enarenados) for wagons and tarred or pitched felt and oakum, plug tobacco (tabaco en pasta), and snuff.

(4) The articles in the following list, when contained in a single vessel or box, shall also be assessed upon the gross weight, including the weight of the vessel or box, without deduction for tare. When they are contained in two or more vessels or boxes, they shall be assessed upon the gross weight, including the weight of the vessels or boxes, but with the deduction for tare specified in each case.

Of Class III.

	Tare, per cent.
Natural colors, prepared	17
Artificial colors and artificial dyes, powdered, in the lump, or in crystals	10
The same, prepared	17
Varnishes	15
Chemical products not specified (item 100)	12
Common soap	6
Starch and fecula for industrial use, dextrin, and glucose	10
Gunpowder, explosives, and fuses for mines (item 114, letter *a*)	10

Of Class XII.

Brined (salted) meats	10
Codfish and stockfish	10
Olive oil	10

(5) The following articles shall be assessed upon their gross weight, including the weight of all the vessels or boxes, deducting the tare specified:

Of Class I.

	Tare, per cent.
Marbles, jasper, and alabaster, in articles included in item 1, letters *c* and *d*	20
Other natural stones and artificial stones in articles included in item 2, letter *c*	12
Manufactures of plaster, in boxes or casks	30
The same, in baskets or other packages	16
Hollow glass and crystal of all kinds, except ordinary bottles:	
In boxes or barrels	30
In cages, crates, baskets, or other packages	20
Ordinary bottles:	
In boxes or barrels	20
In cages or other packages	15
Plain glass and crystal of all kinds:	
In a single box	25
In double wooden boxes	30
In any other packages	20
Glass and crystal in figures, etc.:	
In a single package	35
In two or more packages	40
Worked clay or sandstone, crockery, and porcelain:	
In boxes or casks	30
In baskets or other packages	16

Of Class II.

The articles of ordinary manufacture included in items 30, 38, 41, 43 (letter *c*), 44, 45, 50, 51, 52, 58 (letters *a*, *b*), 59, 60 (letter *a*), 62 (letter *b*), 64, and 76 (letter *b*):	
In boxes or casks	13
In baskets	7
In other packages or in bales	5
The articles of fine manufacture included in items 31, 43 (letter *b*), 46, 49, 53, 58 (letter *c*), 60 (letter *b*), 62 (letter *a*), 65, 73, 74, 75, and 76 (letter *a*):	
In boxes or casks	18
In baskets	12
In other packages or in bales	6

Of Class III.

	Tare, per cent.
Spirits of turpentine	18
Phosphorus:	
In tin cases	25
In boxes or in various packages	35
The pharmaceutical products included in items 98 (letter *b*), 101, and 102	20
Wax and other articles included in item 106	14
Perfumery and essences	20

Of Class VIII.

Paper of all kinds:	
In boxes	10
In other packages or in bales	3

Of Class IX.

Fine wood sawed into leaves	6
Common and curved wood, dressed, and the listings or articles included in items 194, 196, and 197 (letter *a*):	
In boxes	20
In cages or other packages	10
Fine wood, dressed, of items 195 and 197 (letter *b*):	
In boxes	30
In other packages	10
Cork, dressed:	
In boxes	10
In other packages or in bales	5
Reed furniture and the other articles included in item 202:	
In boxes	25
In other packages or in bales	10

Of Class X.

The dressed skins included in item 214 (letters *a*, *b*, *d*, and *e*); articles made by harness makers and belt makers; feathers, not ornamental, and plumes:	
In boxes or casks	15
In other packages or in bales	6
The dressed skins included in item 214 (letter *c*); those in items 215 and 216, patterns of foot wear, gloves, and the manufactured articles included in item 226:	
In boxes or casks	18
In other packages or in bales	8

Of Class XII.

Hog meat and lard and the other articles included in item 261	12
Meat of other kinds	12
Butter	12
Codfish and stockfish (pezpalo):	
In boxes or barrels	10
In bags	2
Rice, in barrels	8
Flour, in barrels	8
Fruits.	
In boxes or barrels	12
In baskets or other packages	8

	Tare, per cent.
Cocoa:	
In bags	1
In double bags	2
In sacks (zurrones)	5
Coffee:	
In bags	1
In double bags	2
In barrels, hogsheads, etc	10
Cinnamon:	
In boxes or casks	15
In bales	4
Bastard cinnamon (canelon) and the other spices included in item 291:	
In boxes or barrels	15
In bags	1
In double bags	2
Tea	10
Vanilla	12
Canned goods and the other articles in items 274, 278, 279, 280, and 281	15
Chocolate and sweetmeats (dulces):	
In boxes or casks	15
In other packages	10
Eggs	25
Nutritious pastes and fecula	10
Common crackers (biscuit)	8
Fine crackers	14
Cheese	12

Of Class XIII.

The fans included in item 301 (letter *a*)	15
Cartridges, with or without the projectile	10
Oilcloths and india-rubber cloths	12
Games and toys	25
India-rubber articles	20
Waterproof and india-rubber fabrics	10

(6) All articles not included in the lists or in the cases previously enumerated shall be assessed upon the net weight of the goods or upon the unit of assessment given in the respective item of the tariff; and the things in which they are packed shall be assessed separately, in accordance with the items of the tariff under which they are classed.

(7) Articles assessed upon their gross weight, without or with the deduction of tare, shall always pay duty upon the weight of all the inner paper, tape, packing, wrappings, cases, or other things in which they are packed.

(8) When any article having a legal tare assigned to it is imported in bulk, or merely fastened with cords or hoops, or wrapped in paper, straw, hay, or other like wrapping, it shall be assessed without deduction of tare.

(9) Articles paying duty on the net weight shall be assessed including the weight of the paper, tape, packing, or inner articles in which they are packed, if they are not boxes or cases. Needles, pins, pens, and the other articles included in items 47, 48, and 63 are excepted, and will pay duty also on the weight of the boxes if they are of pasteboard.

Other boxes and cases and the boxes and cases of other articles shall be assessed in accordance with the items under which they are classed.

Articles placed on cards or pasteboard shall be assessed including the weight of the latter.

Twisted threads of all kinds shall pay duty on the weight of the reels (spools), also.

(10) When two or more articles paying duty upon their gross weight and paying different duties are contained in the same package, the duty shall be assessed upon the article paying the highest duty, including the whole weight of the external case and deducting the tare assigned to it, if any. The other article or articles shall be assessed separately, without any deduction for tare.

(11) When articles paying duty upon their gross weight and paying the same duty, but which have different tares assigned to them, are contained in the same package, the lowest tare shall be deducted. If any of the said articles pay duty upon the gross weight without any deduction for tare, no tare shall be deducted.

(12) When articles paying duty upon their gross weight are contained in the same package with articles paying duty upon their net weight or upon units of assessment other than the weight of the merchandise, they shall all be assessed separately; and those which pay duty upon their gross weight shall be assessed in accordance with the foregoing rules, except that, in this case, no tare shall be deducted for any of the articles contained in the package.

(13) The boxes and bottles in which mineral waters are imported shall be assessed in accordance with the following rules:

The boxes in which the bottles are packed shall be assessed in accordance with item 189, letter *b*, and, in the assessment, 15 per cent of the gross weight of the box and its contents shall be allowed for the weight of the box.

The bottles shall be assessed in accordance with item 10, and, in assessing them, 720 grams each shall be allowed for the weight of the bottles containing 70 centiliters or more.

The weight of the smaller bottles shall be determined by trial; and, in the assessment, the weight of flasks, other than those of glass, and the weight of other articles in which the water may be imported shall be determined in accordance with the items under which they are classed.

(14) The articles in which brandy and liquors are imported* shall be assessed in the following manner:

When the liquors are imported in barrels, casks, hogsheads, etc., the barrel, etc., shall be assessed in accordance with item 191, letter *a*, and, in the assessment, the weight of the barrel or hogshead shall be estimated at 14 per cent of the gross weight when the liquor comes in a single barrel or hogshead, and at 20 per cent of the gross weight when the liquor comes in a double barrel or hogshead.

When the liquor is imported in bottles or flasks and wooden boxes or in baskets, all these articles shall be assessed in accordance with the items under which they are classed.

In assessing the boxes, in accordance with item 189, letter *b*, their weight shall be estimated at 15 per cent of the gross weight.

In assessing the baskets, in accordance with item 201, their weight shall be estimated at 8 per cent of the gross weight.

The weight of the bottles or flasks or other article in which the alcohol, brandy, or liquor may be imported shall be determined by experiment, in order to assess them in accordance with the item under which they are classed respectively.

(15) The articles in which wines* are imported, shall be assessed in the following manner:

When the wine is imported in barrels, casks, hogsheads, etc., the barrel, etc., shall be assessed in accordance with item 191, letter *a*, and the weight of the bar-

*See Provision III, rule 7.

rel or hogshead shall be estimated at 12 per cent of the gross weight if the wine is in a single barrel or hogshead and at 18 per cent of the gross weight if the wine is in a double barrel or hogshead.

When the wine is imported in bottles or flasks and wooden boxes or in baskets, these articles shall be assessed in accordance with the items under which they are classed.

Fifteen per cent of the gross weight shall be allowed as the weight of the boxes, in assessing them in accordance with item 189, letter *b*.

The weight of the baskets shall be estimated at 8 per cent of the gross weight, in assessing them in accordance with item 201.

In assessing ordinary bottles of bordeaux, burgundy, or the like, in accordance with item 10, the weight of each bottle shall be estimated at 760 grams.

The weight of the ordinary half bottles shall be estimated at 400 grams each.

The weight of the ordinary bottles of champagne and the like shall be estimated at 950 grams each.

The weight of the half bottles of that class shall be estimated at 550 grams each.

The weight of bottles and flasks and of all other articles in which wine is imported, differing from the ordinary kind, and the capacity of which is not known, shall be determined by experiment, in order to assess them in accordance with the items under which they are respectively classed.

(16) Articles in which beer and cider* are imported shall be assessed in the following manner:

If the beer or cider is imported in barrels, hogsheads, casks, etc., the barrel or cask shall be assessed in accordance with item 191, letter *a*, and the weight of the cask shall be estimated at 18 per cent of the gross weight if the beer or cider is imported in single barrels and at 25 per cent of the gross weight if the beer is imported in double barrels.

When the beer or cider is imported in bottles or flasks placed in wooden boxes or in barrels, these articles shall be assessed in accordance with the items under which they are classed respectively.

In assessing the outer boxes or barrels in accordance with items 189, letter *b*, or 191, letter *a*, respectively, their weight shall be estimated at 15 per cent of the gross weight.

The weight of the bottles or flasks or of any other vessel in which the beer or cider may be imported shall be determined by experiment, in order to assess it.

PROVISION VII.—ARTICLES THE IMPORTATION OF WHICH IS PROHIBITED.

(1) Arms of war of all kinds and projectiles and ammunition for the same.

(2) Arms of all other kinds, ammunition for the same, and dynamite, gunpowder, and all explosives generally, unless the importer exhibits a special permit by name from the superior authorities of the island.

(3) Sugar of all kinds, except that coming from Spanish provinces or possessions, the product of the same.

(4) Butter and animal fats intended as food, if they are made with margarin or oleomargarine.

(5) Foreign silver or copper coins.

(6) Honey and molasses of all kinds.

(7) Pictures, figures, and all other objects and publications injurious to morals.

(8) Pharmaceutical preparations or secret remedies the ingredients of which are not known or the formula of which has not been published.

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*See Provision III, rule 7.

(9) Saccharine (except such as is imported for pharmaceutical use), and substances intended for food containing saccharine.

(10) Leaf and manufactured tobacco of foreign origin, except snuff and plug tobacco.

(11) Artificial wines, not medicinal, and the ingredients of which are not known and adulterated wines.

TARIFF OF IMPORTS.—ABBREVIATIONS USED.

Pro., General provisions of the tariff.
G. W., Gross weight.
N. W., Net weight.
G. W.—T., Gross weight or tare, as the case may be.
T., Tare.
S. T., Special tare.
Kg., Kilogram.
Hectog., Hectogram.
Hectol., Hectoliter.
C. M., Cubic meter.
T. A., Ton of admeasurement of vessels.

Tariff of imports.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS I.—STONES, EARTHS, MINERALS, GLASSWARE, AND CERAMIC PRODUCTS.			
	First group.—Stones and earths employed in building, the arts, and manufactures.			
1	Marbles, jasper, and alabaster·		*Pesos.**	*Pesos.**
	a. In the rough or in polished fragments, squared or prepared to give them shape, G. W.	100 kg.....	0.35	0.50
	b. Cut into slabs or steps of any size, polished or not polished, G. W.	.....do	1.50	1.00
	c. In sculptures, reliefs, flower pots, jars, and similar articles for the adornment of dwelling houses, T. (Pro. VI, rule 5).	.....do	2.70	3.10
	d. Dressed or chiseled, in all other kinds of articles, polished or unpolished, T. (Pro. VI, rule 5).	.....do	2.00	2.00
	Marbles attached to furniture shall be assessed in accordance with the items under which the furniture is classed.			
2	Other natural stones and artificial stones:			
	a. Undressed, G. W.	.....do	.20	.20
	b. In slabs or steps, G. W.	.....do	1.00	.50
	c. Dressed, in other articles, T. (Pro. VI, rule 5).	.....do	1.60	1.00
3	Earths employed in the industries and arts, cement, lime, and plaster, G. W.	.....do	.50	.60
4	Plaster in manufactured articles:			
	a. In figures, T. (Pro. VI, rule 5).	.....do	5.00	3.00
	b. In other articles, T. (Pro. VI, rule 5).	.....do	1.25	.75
	Second group.—Coal.			
5	Mineral coals and coke, G. W.	1,000 kg..	.....	.40
	Before the coal is unloaded, the vessels bringing it shall be examined and the approximate amount of the cargo shall be calculated from the empty space appearing in the hold of the vessel and the number of net tons of admeasure-			

* The peso is valued by the United States Treasury at 0.926 cent United States currency.

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS 1.—STONES, EARTHS, MINERALS, ETC.—continued.			
	ment of the vessel, allowing 800 kilograms of coal or 450 of coke for each occupied cubic meter of the net tonnage; and if the result of this comparison does not agree with the amount stated, the assessment shall be made by weight, and the verifications made and the employee or employees making them shall be entered upon the assessments.			
	Third group.—Esquisto, bitumen, and their derivatives.			
	Assessment of shipments of this group: Whenever there is any doubt as to the applicability of items 6, 7, and 8, the custom-houses must consult the intendancy of finance before making the assessment. In cases of doubt and in all assessments of raw petroleum, samples shall be taken in the following manner: (1) A sample of 200 cubic centimeters shall be taken from each 50 boxes or smaller number of boxes or from each 10 barrels or smaller number of barrels found to be of the same class in each lot that is the subject of the declaration. (2) These samples shall be mixed together in a large flask, from which shall be taken, after the cargo has been cleared, 2 liters, which shall be poured into two bottles, which, after being sealed with sealing wax and labeled with the signatures of the employees and the party concerned, shall be given to the chemical expert of the custom-house to be tested. (3) The goods declared shall then be assessed in accordance with the item under which they are classed, and the party concerned shall be bound by the result of the analysis; and the clearance shall not be considered final until the result of the analysis is known. (4) The samples shall be analyzed within one month, and no further time shall be allowed the expert. The parties concerned shall have the right to be present at the opening of the samples and at the analysis, provided they make a request to that effect at the time of putting their signatures on the samples; and they may appeal to the intendancy of finance from the decision rendered by the director of the custom-house, based upon the report of the expert. (5) When a new analysis is requested in the appeal of the parties concerned, the cost of such analysis shall be charged to them, unless it is found that the assessment ordered by the custom-house should be rectified. Otherwise, the cost shall be defrayed by the administration (of the custom-house). (6) To the end that the administration may always know the nature of the products imported under the items of this group, the custom-houses shall make the following distinctions in the statistics, and shall make a note of them on the assessment papers: Item 6. *a.* Tar and other liquid substances, even if of a thick consistency. *b.* Pitch, asphalt, schist, and other solid substances or pasty substances. Item 7: *a.* Raw petroleums. *b.* Other raw oils which may be intended for the preparation of illuminating oils.			

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS I.—STONES, EARTHS, MINERALS, ETC.—continued.			
	Third group.—Esquisto, bitumen, etc.—Continued.			
	Item 7—continued.			
	c. Oleonaphtha and the other products included in the item.			
	Item 8:			
	a. Rectified petroleums.			
	b. Other rectified oils for illumination.			
	c. Benzine, vaseline, and the other products included in the item.			
	The distinctive characteristics of the products comprised in this group are stated in Appendix III of this tariff.		*Pesos.*	*Pesos.*
6	Mineral tar and pitch, asphalt, bitumen, and schist, G. W.....	100 kg.....	.....	1.10
	The custom-houses shall take special care that neither raw petroleum, nor oleonaphtha, nor oils derived from schist are imported under the name of tar or in combination with tar. Tar should not contain, in any perceptible degree, volatile products or oils that can be extracted by distillation at 300° C.; hence, when the presence of volatile products or oils is observed in products presented under the name of tar, the customs authorities must consult the intendancy of finance as to the applicability of item 7. Care must likewise be taken that impure paraffin or other substances comprised in item 105 of Class III of the tariff are not imported as classed under this item under the name of asphalt or bitumen.			
	The pitched oakum, tarred felt, and sanded oilcloth which were formerly assessed under this item shall be assessed hereafter under item 309 of Class XIII.			
7	Oleonaphtha, raw natural petroleum, and raw oils derived from schist, G. W.	.....do	.....	3.08
	Within the meaning of this tariff: (*a*) Shall be understood by raw oils derived from esquistos, those which proceed from the first distillation of the esquistos. They are distinguished by their density of nine hundred to nine hundred and twenty thousandths—that is to say, from 66° to 57½° of the centesimal areometer, equivalent to 24.69° to 21.48° of that of Cartier. (*b*) Raw natural petroleum shall mean that which is imported in the same state as that in which it leaves the mines (wells), without being subjected to any process altering or modifying its natural chemical composition. When distilled gradually and continuously up to the temperature of 300° C., it should leave a residuum exceeding 40 per cent of its original weight.			
	Under this item shall be assessed the oil, the residuum of the distillation of petroleum, known as gas oil, when it is imported directly by the gas factories for their own use, and provided that it is imported directly through the president of the company, and that the company is subject to the control of the State within the factories. Raw mineral oils mixed with animal oils shall also be assessed under this item; and raw mineral oils mixed with vegetable oils, when they are intended exclusively for lubricating machinery.			
8	Rectified and refined petroleum and other mineral oils for illumination, benzine, gasoline, and mineral oils not specified, and vaseline, G. W.	.....do	.....	5.20
	Petroleum and other mineral oils not possessing the properties enumerated in the note to item 7 shall be regarded as rectified.			

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS I.—STONES, EARTHS, MINERALS, ETC.—continued.			
	Fourth group.—Minerals.		*Pesos.*	*Pesos.*
9	Minerals, G. W.	100 kg		0.20
	Fifth group.—Crystal and glass.			
10	Ordinary hollow glass and electrical insulators, T. (Pro. VI, rule 5). Common glass bottles for bottling beer, rum, and sparkling wines manufactured from domestic fruits shall be allowed a rebate of 60 per cent from the duties of this item, when they are imported and declared for assessment by manufacturers of those beverages.	do	2.00	30
11	Crystal and glass imitations of crystal:			
	a. In cut, engraved or gilt articles, T. (Pro. VI, rule 5)	do	18.00	10.00
	b. Other articles, T. (Pro. VI, rule 5). In this item are included bottles, glasses, cups, lamps, stand lamps, and other articles for the table and for illumination, white or colored.	do	9.50	5.40
12	Flat glass or crystal:			
	a. In slabs for floors or lights, T. (Pro. VI, rule 5)	do	1.65	1.65
	b. For sashes and other articles, provided it is not polished, beveled, engraved, or stained, T. (Pro. VI, rule 5).	do	3.40	3.40
	c. In leaded sashes and polished or beveled plates, T. (Pro. VI, rule 5).	do	5.80	4.00
	d. In engraved or stained articles, T. (Pro. VI, rule 5)	do	11.60	8.00
13	Glass and crystal, coated with quicksilver, silver, or other metals:			
	a. In ordinary mirrors, the glass of which does not exceed 2 millimeters in thickness, coated with red or dark mercurial varnish, T. (Pro. VI, rule 5).	do	12.00	8.00
	b. Other mirrors, not beveled, T. (Pro. VI, rule 5)	do	17.50	12.50
	c. In beveled plates	do	21.00	15.00
14	Glass and crystal in figures, jars, flower pots, and similar ornaments for the dressing table and rooms, crystals for spectacles (eyeglasses) and watches, stones in imitation of fine or precious stones, and enamels, T. (Pro. VI, rule 5). Separate or spare pieces, forming an integral part of hanging or hand lamps or chandeliers, shall be assessed under this item.	Kg	.60	.55
15	Incandescent electric lamps, mounted or not	100		3.00
	Sixth group.—Ceramic products.			
16	Clay in unvarnished flagstones, bricks, and tiles for the construction of buildings, furnaces, etc., and articles of fireproof clay, G. W.	100 kg	.70	.30
17	Clay, cement, and sandstone, in flagstones for paving, tiles, varnished tiles, or pipes, G. W.	do	1.00	.50
18	Clay or sandstone, in hollow ware, glazed or unglazed:			
	a. In kitchen utensils or others for domestic use, T. (Pro. VI, rule 5).	do	1.25	.75
	b. In table crockery or other articles, if not gilt or painted or embossed, T. (Pro. VI, rule 5).	do	5.85	3.00
	c. In gilt, painted, or embossed articles, T. (Pro. VI, rule 5).	do	10.50	4.00
19	Delft, in articles of hollow manufacture or in dishes, plates, etc.:			
	a. Without paintings, gilding, or embossing, T. (Pro. VI, rule 5).	do	5.85	3.00
	b. Gilt, painted, or embossed, T. (Pro. VI, rule 5).	do	11.50	4.50

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty
	CLASS I.—STONES, EARTHS, MINERALS, ETC.—continued.			
	Sixth group.—Ceramic products—Continued.			
20	Porcelain, in articles of hollow manufacture or in plates, dishes, etc.:		*Pesos.*	*Pesos.*
	a. Not painted, gilt, or embossed, T. (Pro. VI, rule 5).....	100 kg.....	10.50	4.00
	b. Painted, gilt, or embossed, T. (Pro. VI, rule 5).....	.....do	18.35	5.00
21	Figures, jars, flower pots, embossings, toilet ornaments, and other articles for ornamenting rooms, of fine clay, delft, sandstone, porcelain, or biscuit, T. (Pro. VI, rule 5).	Kg..... ...	.35	.12
	CLASS II.—METALS AND ALL MANUFACTURES IN WHICH A METAL IS THE BASE.			
	First group.—Gold, silver, and platinum and their alloys.			
22	Gold and platinum, in ornaments or jewelry, with or without precious stones or pearls; silver, in ornaments or jewelry, with precious stones or pearls; and precious stones, pearls, or seed pearls, loose or unset, N. W.	Hectog..	.....	7.50
23	Gold or platinum, worked in any other form or articles, N. W.	.....do	.....	2.80
24	Silver in ingots, bars, plates, leaves, or dust, N. W.....	Kg.....	2.60	.....
25	Silver, in ornaments or jewelry, without precious stones or pearls, N. W.	Hectog..	.....	1.50
26	Silver, worked in any other form or articles, and platinum in ingots, N. W.	Kg.....	.....	8.00
27	Articles of Meneses or Ruolz silver, N. W.....	.....do	1.20	1.20
	Second group.—Cast iron.			
	Articles of malleable cast iron shall pay the duty imposed upon manufactures and articles of wrought iron.			
28	Cast iron, in pigs, G. W.....	100 kg.....	.30	.20
29	Cast iron, in articles having no coating or ornament of any other metal or of porcelain, if no polishing or turning labor has been expended upon them:			
	a. Bars, joists, plates, grates for fireplaces, columns, and pipes, G. W.	.....do	.60	.60
	b. Oil boxes for wagons and carriages, and chairs for railroads, G. W.	.....do	.75	.....
	c. Other articles, G. W.....	.....do	1.50	.75
30	Cast iron, in all kinds of articles having no coating or ornament of any other metal or of porcelain, polished or turned, T. (Pro. VI, rule 5).	.....do	2.40	1.20
31	Cast iron, in manufactured articles of all kinds, enameled, gilt, tinned, or with a coating or ornaments of other metals or of porcelain, T. (Pro. VI, rule 5).	.....do	4.00	1.80
	Third group.—Wrought iron and steel.			
32	Wrought iron, rough, or wrought in blocks or bars, and steel in bars, G. W. By "tochos" is meant rough wrought iron in cakes (blocks) or prisms, of a cylindrical or any other form, containing scoria. (Wrought iron containing scoria usually presents an unequal and wrinkled appearance.) Wrought iron in blocks or prisms, not containing scoria, shall be assessed under item 33, letter *b*. In doubtful cases, the iron shall be tested to determine its class.	.....do	.60	.40
33	Wrought iron or steel, rolled:			
	a. In rails, G. W.....	.....do	.85	.....

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS 11.—METALS, ETC.—continued.			
	Third group.—Wrought iron and steel—Continued.			
	Wrought iron or steel, rolled—Continued.		*Pesos.*	*Pesos.*
	b. In bars of all other kinds, including "palanquilla;" tires, hoops, and joists, G. W. By "palanquilla" is meant the rod of iron or steel intended for the manufacture of wire and the thickness of which exceeds 8 millimeters.	100 kg.....	1.50	0.90
	c. Bars of all kinds of fine crucible steel, G. W. Steel melted in the crucible is distinguished from the bars and other pieces of common iron or steel by its clean-cut edges, a very smooth surface, by being of a darker blue than iron, and by its fracture being of a finer and closer grain. (This steel is usually presented in the shape of round, square, octagonal, triangular, or flat bars.)	.....do	2.60	1.50
34	The same, rolled in plates:			
	a. Not polished or tinned, of 3 or more millimeters in thickness, G. W.	.....do	1.80	1.10
	b. Plates, not polished or tinned, of less than 3 millimeters in thickness, and straps (flejes), G. W. By "flejes" is meant flat straps or bands of less than 3 millimeters in thickness, not polished.	.....do	2.25	1.20
	c. Tinned plates and tin (hoja de lata)	.....do	3.10	1.50
	d. Plates, polished, corrugated, perforated, cold-rolled, galvanized or not; and polished straps or bands, G. W.	.....do	2.60	1.30
35	The same, molded in pieces in the rough, without any polishing, turning, or preparation:			
	a. Weighing 25 kg. or more, each, G. W.	.....do	1.60	1.00
	b. Weighing less than 25 kg., G. W.	.....do	2.35	1.35
36	The same, molded in finished pieces:			
	a. Wheels weighing more than 100 kg., splices (eclises), fastening plates (placas de asiento), ties and straight axles, springs for railroads and tramways, and oil boxes, G. W.	.....do	1.20	.....
	b. Wheels weighing not more than 100 kg., springs other than for railroads or tramways, bent or curved axles, G. W.	.....do	2.80	1.40
37	Wrought iron or steel, in pipes:			
	a. Covered with sheet brass (chapa de laton), G. W.	.....do	2.75	1.40
	b. Of other kinds, galvanized or not, G. W.	.....do	2.20	1.40
38	The same, in wire, galvanized or not:			
	a. Of 2 millimeters in diameter or more, T. (Pro. VI, rule 5).	.....do	2.25	1.00
	b. From more than one-half of a millimeter to 2 millimeters, T. (Pro. VI, rule 5).	.....do	2.75	1.30
	c. Of one-half of a millimeter or less, and that which is covered with any stuff, T. (Pro. VI, rule 5).	.....do	3.50	1.60
39	The same, manufactured in large pieces consisting of bars, or of bars and plates fastened together by rivets or screws, and the same without rivets, with holes or cut to measure, for bridges, frames, or other constructions, G. W. Floating docks, whatever their power, size, or construction, shall continue to pay a discriminating duty of $8,500 and a revenue duty of 15 per cent of that sum.	.....do	2.20	1.80
40	The same, in anchors, chains for vessels or for machinery, mooring hawsers, switches, and signals, G. W.	.....do	1.65	.....

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS II.—METALS, ETC.—continued.			
	Third group.—Wrought iron and steel—Continued.			
41	Wrought iron or steel, in metallic cloths (cloth worked into frames or other articles shall pay an additional duty of 40 per cent of the duty):		*Pesos.*	*Pesos.*
	a. Up to 20 threads to the inch, T. (Pro. VI, rule 5)..... This means half the sum of the threads of the warp and the woof in a square inch of 23 millimeters.	100 kg.....	4.50	2.00
	b. Of 20 threads or more to the inch, T. (Pro. VI, rule 5)..	Kg.....	.10	.06
42	The same, in cables, fences (barbed), and latticework (gratings), and springs for furniture, G. W.	100 kg.....	2.10	1.00
43	The same, in tools:			
	a. Agricultural implements and hammers and anvils, G. W.	.....do	.80	.....
	b. Fine tools for the arts, trades, and professions, made of steel melted in the crucible, T. (Pro. VI, rule 5).	.....do	12.00	8.00
	c. Other tools, T. (Pro. VI, rule 5).....	.....do	5.50	2.50
44	The same, in screws, nuts, tirafondos, washers, and rivets, and Paris tips (puntas de Paris) and the like, T. (Pro. VI, rule 5).	.....do	3.20	1.00
45	The same, in nails, hook nails, and tacks, T. (Pro. VI, rule 5)..	.....do	2.25	1.00
46	Buckles:			
	a. Gilt, plated, or nickeled, T. (Pro. VI, rule 5).....	Kg.....	.25	.20
	b. Other kinds, T. (Pro. VI, rule 5).....	.....do	.075	.15
47	Needles for sewing or embroidering, pins and pens, and pieces for clocks or watches, N. W. (Pro. VI, rule 9).	.....do	.70	.00
48	Harness needles (agujas jalmeras) and the like, hooks and eyes and hairpins (horquillas), and surgical instruments, N. W. (Pro. VI, rule 9).	.....do	.30	.30
49	Knives of all kinds, sewing scissors, small arms (side arms), and pieces for the same, T. (Pro. VI, rule 5).	.....do	.40	.40
50	Firearms:			
	a. Unpolished barrels for portable arms, G. W.....	.....do	.15	.25
	b. Short arms, to wit, pistols and revolvers, and pieces for the same, T. (Pro. VI, rule 5).	.....do	1.00	1.00
	c. Muzzle-loading fowling pieces and pieces for the same, T. (Pro. VI, rule 5).	.....do	.60	.60
	d. Breech-loading fowling pieces and loose pieces for the same, T. (Pro. VI, rule 5).	.....do	3.50	2.50
51	Manufactured tin, T. (Pro. VI, rule 5).....	100 kg.....	7.90	3.00
52	Wrought iron and steel, in articles of all kinds not specified of ordinary manufacture, although coated with lead, tin, or zinc, or painted or varnished:			
	a. When the coating predominates in the manufacture of the article, T. (Pro, VI, rule 5).	.....do	5.40	2 00
	b. When the coating does not predominate in the manufacture of the article, T. (Pro. VI, rule 5).	.....do	4.00	1.80
53	Wrought iron and steel, in articles of all kinds not specified of fine manufacture, to wit, in polished or enameled articles, articles coated with porcelain, nickel, or other metal (except lead, tin, and zinc), or having ornaments, borders, or pieces of other metals, of glass, or of ceramic products:			
	a. Articles in which the coating predominates, T. (Pro. VI, rule 5).	.....do	6.00	2.50
	b. Articles in which the coating does not predominate, T. (Pro. VI, rule 5).	.....do	5.00	2.50

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Reve dut
	CLASS II.—METALS, ETC.—continued.			
	Fourth group.—Copper and alloys of common metals into which copper enters (brass, bronze, etc.).		*Pesos.*	*Pes*
54	Sheet copper (cascara de cobre), copper of the first smelting, and old copper, brass, etc., G. W.	100 kg.....	4.00	3
55	Copper or its alloys, in bars, G. W.....	.....do	4.90	4
56	The same, rolled in bars of all kinds, G. W.....	.....do	7.20	4
57	The same, rolled in plates, G. W.....	.....do	9.00	5
58	The same, in wire, galvanized or not:			
	a. Of 1 millimeter or more in diameter, T. (Pro. VI, rule 5).	.....do	10.50	4
	b. Of less than 1 millimeter, T. (Pro. VI, rule 5).....	.....do	12.60	4
	c. Gilt, plated, or nickeled, T. (Pro. VI, rule 5).....	Kg.....	.50	
59	The same, in wire covered with cloth or with insulating covers, and cables for conducting electricity along the highway, T. (Pro. VI, rule 5). By "cables for conducting electricity" are meant those consisting of one or more wires of copper or of an alloy into which copper enters, whatever their thickness, provided they are covered with an insulating wrapping, and whether or not contained in iron or lead pipes or strengthened with iron or steel cords or wires.	100 kg.....	.....	15
60	The same, in metallic cloth (cloth worked into frames or other articles shall pay an additional duty of 60 per cent of the duty):			
	a. Up to 100 threads to the inch, T. (Pro. VI, rule 5)..... This means half of the sum of the threads of the warp and woof in a square inch of 23 millimeters.	.....do	11.60	
	b. Of 100 threads or more to the inch, T. (Pro. VI, rule 5)...	Kg.....	.25	
61	The same, in pipes, bearings (cojinetes), plates for hearths, and unfinished pieces of braziers' work, G. W.	100 kg.....	9.55	.....
62	Nails and tacks:			
	a. Gilt, plated, or nickeled, T. (Pro. VI, rule 5).....	Kg.....	.30	
	b. Other kinds, T. (Pro. VI, rule 5).....	.....do	.12	
63	Pins and pens, N. W (Pro. VI, rule 9).....	.....do	.80	
64	Copper and its alloys, in manufactured articles not specified, varnished or not, T. (Pro VI, rule 5).	.....do	.40	
65	The same, in gilt, plated, or nickeled articles, not specified, T. (Pro. VI, rule 5).	.....do	.80	
	Fifth group.—Other metals and their alloys.			
66	Quicksilver or mercury, G. W.....	.....do	.....	
67	Nickel, aluminium, and alloys having these metals as their base, in cakes or pigs, G. W.	100 kg.....	.....	5
68	Tin and its alloys, in cakes or pigs, G. W.....	.....do	6.00	4
69	Zinc, lead, and other metals not specified and their alloys, in cakes or pigs, G. W	.....do	1.50	1
70	Nickel, aluminium, and their alloys, in bars, plates, pipes, and wire, G. W.	.....do	1.50	14
71	Tin and its alloys, in bars, plates, pipes, or wire, G. W.....	.....do	10.00	7
72	Zinc, lead, and other metals, in bars, plates, pipes, or wire, G. W.	.....do	2.50	1
73	Tin beaten into leaves (tin foil), and capsules for bottles, T. (Pro. VI, rule 5)	Kg.....	.035	
74	Nickel and aluminium and their alloys, manufactured into any kind of article T. (Pro. VI, rule 5).	.....do	.30	
75	Tin and its alloys (britannia metal, etc.), manufactured into any kind of article, T. (Pro VI, rule 5).	.....do	.25	

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS II.—METALS, ETC.—continued.			
	Fifth group.—Other metals, etc.—Continued.			
76	Zinc, lead, and other metals and their alloys, manufactured:		*Pesos.*	*Pesos.*
	a. Into gilt, plated, or nickeled articles, T. (Pro. VI, rule 5).	Kg.....	0.35	0.30
	b. Into other articles, T. (Pro. VI, rule 5).....	.....do	.15	.15
	Sixth group.—Waste and dross.			
77	Iron and steel filings, shavings, and parings, and other waste from the casting or working of common metals, which can only be utilized by being recast, G. W.	100 kg.....	.....	.30
78	Dross (slag) coming from the melting of minerals, G. W.....	.....do	.....	.05
	CLASS III.—SUBSTANCES EMPLOYED IN PHARMACY AND CHEMICAL INDUSTRIES AND PRODUCTS OF THE SAME.			
	First group.—Simple drugs.			
79	Oleaginous seeds and the pith of the cocoanut, G. W.....	.....do	.90	2.00
80	Resins and gums:			
	a. Colophony (rosin), pitch, and similar products, G. W..	.....do	.....	1.00
	b. Spirits of turpentine, T. (Pro. VI, rule 5).....	.....do	4.25	2.50
	c. India rubber and gutta-percha, raw or melted in cakes, G. W.	.....do	.....	6.00
81	Extracts of licorice, camphor, aloes, and other similar vegetable juices, G. W.	.....do	3.75	5.25
82	Tan bark, G. W.....	.....do	.20	.25
83	Opium, G. W.....	Kg.....	.....	2.30
	Opium prepared for smoking shall pay an additional duty of 100 per cent of the duty.			
84	Other simple products of the vegetable kingdom, not specified, G. W.	100 kg.....	2.75	2.75
85	Products of the animal kingdom used in medicine, not specified, G. W.	.....do	1.20	1.80
	Second group.—Colors, dyes, and varnishes.			
86	Natural colors, in dust (ground) or in the lump (ocher, etc.), G. W.	.....do	.50	60
87	Artificial colors having a metallic base:			
	a. In dust or in the lump, G. W.—T. (Pro. VI, rule 4).....	.....do	2.55	2.55
	b. Prepared in paste, with oil or water, and graphite or colored pencils, G. W.—T. (Pro. VI, rule 4).	.....do	5.95	5.95
88	Other artificial colors, in dust, crystals, lump, or paste, G. W.—T. (Pro. VI, rule 4).	Kg.....	.16	.25
89	Natural dyes.			
	a. Wood, bark, roots, etc., for dyeing, G. W.....	100 kg . .	.20	.20
	b. Garance, G. W.....	.....do	4.50	4.50
	c. Indigo and cochineal, G. W	Kg.....	15	.20
90	Artificial dyes:			
	a. Extracts of logwood, archil, and others for dyeing, G. W.—T. (Pro. VI, rule 4)	100 kg	3.00	5.00
	b. Writing, drawing, and printing ink, G. W.—T. (Pro VI, rule 4)	.....do	5.95	3.00
	c. Colors derived from coal, G. W —T. (Pro. VI. rule 4)..	Kg.....	.16	.20
91	Varnishes, G. W —T. (Pro. VI, rule 4).....	100 kg.....	7.50	7.50
92	Bitumen, G. W.....	.....do	5.00	3.00
	Third group.—Chemical and pharmaceutical products			
93	Simple bodies.			
	a. Sulphur G. W.....	.....do	.30	.15
	b. Bromine, borax, iodine, and phosphorus—phosphorus, T (Pro. VI, rule 5), the rest, G. W.	Kg.....	.....	.35

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Re d
	CLASS III.—SUBSTANCES EMPLOYED IN PHARMACY, ETC.—cont'd.			
	Third group.—Chemical and pharmaceutical products—Continued.			
94	Inorganic acids:		*Pesos.*	
	a. Hydrochloric (muriatic), boric, nitric, sulphuric, and aqua regia, G. W.	100 kg.....	0.45	
	b. Other inorganic acids.....	.....do	.....	
95	Organic acids:			
	a. Oxalic, citric, tartaric, and carbolic, G. W.....	.....do	.50	
	b. Oleic, stearic, and palmitic, G. W.....	.....do	3.75	
	c. Acetic, G. W.....	.....do	.....	
	d. Other organic acids, G. W.....	.....do	.....	
96	Oxides and oxyhydrates (ammonia, sodium, potassium, other caustic alkalies, and barilla), G. W.	.....do	.65	
97	Inorganic salts:			
	a. Chloride of sodium (common salt), G. W.....	.....do	.35	
	b. Chloride of potassium, sulphate of sodium (sosa), iron or magnesia, carbonate of magnesia, and alum, G. W.	.....do	.35	
	c. Sulphate of ammonia, phosphates and superphosphates of lime, and nitrates of potassium and sodium.	.....do	.....	
	d. Other ammoniated salts, salts of copper, chloride of lime, sulphate of potassium, hyposulphite of sodium, and borax, G. W.	.....do	.....	
	e. Chlorates of sodium and potassium, G. W.....	.....do	.....	
98	Organic salts:			
	a. Acetates and oxalates, G. W.....	.....do	.....	
	b. Citrates and tartrates, T. (Pro. VI, rule 5).....	.....do	.....	
99	Alkaloids and their salts and chlorides of gold and silver, N. W.	Kg.....	.....	
100	Chemical products not specified, G. W.—T. (Pro. VI, rule 4)..	.....do	.10	
101	Pills, capsules, medicinal sugarplums, and the like, T. (Pro. VI, rule 5).	.....do	.50	
102	Pharmaceutical products not specified, T. (Pro. VI, rule 5)...	.....do	.25	
	The products or substances included in items 100, 101, and 102 shall be examined by the chemical experts, who shall sign the declarations relative to them, in conjunction with the employees of the custom-house.			
	Fourth group.—Oils, fats, wax, and their derivatives.			
103	Vegetable oils:			
	a. Solid (cocoanut, palm, etc.), G. W.....	100 kg.....	4.50	
	b. Liquid, except olive oil, G. W.....	.....do	8.00	
104	Animal oils and fats, raw:			
	a. Cod-liver oil and others for medicinal use, not purified, G. W.	.....do	.....	
	b. Glycerin, oleine, stearin, and spermaceti, raw, G. W..	.....do	3.75	
	c. Other oils and fats, raw, G. W.....	.....do	1.20	
105	Mineral, vegetable, and animal wax, unmanufactured, and paraffin in cakes, G. W.	.....do	.....	
106	Manufactures of stearin and paraffin and wax of all kinds, prepared, T. (Pro. VI, rule 5).	.....do	8.50	
107	Common soap, G W.—T. (Pro. VI, rule 4).....	.....do	3.00	
108	Perfumery and essences, T. (Pro. VI, rule 5).....	Kg.....	.33	
	Fifth group.—Sundries.			
109	Artificial and chemical fertilizers, G. W.....	.....do	.....	
110	Mineral waters, natural or artificial, S. T. (Pro. VI, rule 13)..	Hectol...	1.20	

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty
	CLASS III.—SUBSTANCES EMPLOYED IN PHARMACY, ETC.—cont'd.			
	Fifth group.—Sundries—Continued.		*Pesos.*	*Pesos.*
111	Starch and fecula for industrial use, dextrin, and glucose, G. W.—T. (Pro. VI, rule 4).	100 kg	3.50	1.40
112	Glue, albumen, and gelatin, G. W.....	.....do	3.60	4.20
113	Carbon prepared for electric lights G. W.....	.....do	... .	6.00
114	Gunpowder and explosives·			
	a. Powder, explosive mixtures, and fuses for mines, G. W.—T. (Pro. VI, rule 4).	.....do	8 50	4.00
	b. Sporting powder and other explosives not intended for mining, N. W.	Kg.....	.15	.20
	All powder intended for firearms, of whatever class, shall be regarded as sporting powder, such being meant as will pass through a metallic sieve of round holes of 2½ millimeters in diameter.			
	CLASS IV.—COTTON AND MANUFACTURES OF COTTON.			
	First group.—Raw cotton and spun goods.			
115	Raw cotton and its waste, G. W.....	100 kg.....	.....	2.00
	Spun cotton of less than 20 centimeters in length, shall be regarded as waste.			
116	Spun goods (yarn) for crocheting, embroidering, and sewing, including the weight of the reel (spool), N. W. (Pro. VI, rule 9).	Kg.....	.50	.18
	Yarn containing, in any proportion, a mixture of threads of common metal shall be assessed under item 164 of Class VII.			
	Second group.—Woven fabrics.			
	NOTE I.—The fabrics assessed under the items of this group shall pay, according to circumstances, the following additional duties, according to the mixture (see Provision IV):			
	(1) Cotton fabrics containing threads of hemp, jute, flax, ramie, or pita (Mexican hemp), shall pay an additional duty of 15 per cent of the duties of the item, provided the number of threads of hemp, jute, flax, ramie, or pita contained in the warp and woof does not exceed the fifth part of the whole number of threads of which the fabric is composed. When the threads of hemp, jute, flax, ramie, or pita exceed the fifth part of the whole, the fabrics shall be assessed under the corresponding items of the second group of Class V.			
	(2) Cotton fabrics containing wool, wool flock, or wool waste, or threads of hair of any kind, or of waste of the same, shall pay an additional duty of 35 per cent of the duties, provided the number of threads of wool, wool flock, or wool waste, or of hair or waste of hair, counted in the warp and woof, does not exceed one-fifth of the whole number of threads of which the fabric is composed. When the threads of wool, flock wool, or wool waste, or of hair or waste of hair exceed one-fifth of the whole number of threads, the fabrics shall be assessed under the corresponding items of Class VI as mixed woolen fabrics.			
	(3) Cotton fabrics containing threads of silk or flock silk shall pay an additional duty of 70 per cent, provided the number of the threads of silk or flock silk, counted in the warp and woof, does not exceed the fifth part of the whole number of threads of which the fabric is composed. When the threads of silk or flock silk exceed the fifth part			

Tariff of imports—Continued.

No of item.	Articles.	Unit of assessment.	Discriminating duty.	Reven duty
	CLASS IV.—COTTON AND MANUFACTURES, ETC.—continued.			
	Second group.—Woven fabrics—Continued.			
	of the whole, the fabrics shall be assessed under the corresponding items of Class VII.			
	Knit goods, tulles, laces, blondes, and edgings (puntillas) (see Provision IV, rule 7), ribbons (tape) (Provision IV, rule 8) and passementerie (Provision IV, rule 9), are excepted from the provisions of this note.			
	NOTE II.—Articles in this group shall pay the following additional duties under each of the following circumstances (see Provision IV)			
	A. Fabrics brocaded or flowered with silk or flock silk shall pay an additional duty of 35 per cent of the duties of the fabric.			
	B. Articles embroidered by hand, by machinery other than the loom, or with passementerie worked upon them shall pay an additional duty of 30 per cent of the duties on the fabric. When the embroidery contains threads, bugles, (canutillo) or spangles of common metals or silver, the additional duty shall be 60 per cent of the duties on the fabric. When the threads, bugles, or spangles are of gold, the additional duty shall be 100 per cent.			
	C. Fabrics and passementerie containing metal threads or bugles (canutillo) of common metals or of silver shall pay an additional duty of 50 per cent of the duties on the article. If the threads or bugles are of gold, the additional duty shall be 100 per cent.			
	D. Fabrics made up or partly made up into bags shall pay an additional duty of 15 per cent of the duties under the corresponding item.			
	Cloaks and shawls, traveling blankets, coverlets, sheets, towels, tablecloths and napkins, scarfs, veils, shawls, mantelets, and hemmed or hemstitched handkerchiefs shall pay an additonal duty of 30 per cent of the duties on the fabric, for the making up.			
	Other made-up articles (confecciones), ready-made clothing, and wearing apparel (prendas de vestir) of all kinds, finished, half finished, or merely basted, shall pay, upon their whole weight, the duties on the fabric of which the article is chiefly composed in its most visible external part and an additional duty of 100 per cent.			
	Knit articles specified in the Tariff are excepted (exempted) from the additional duty for making up.			
117	Smooth and plain fabrics, with or without a nap, weighing 10 or more kilograms to the 100 square meters, unbleached, bleached, or dyed:		*Pesos.*	*Pesos*
	a. Up to 9 threads. N. W.	Kg.....	0.18	0
	b From 10 to 15 threads, N. W.	.....do	.22	
	c. From 16 to 19 threads, N. W.	.....do	.28	
	d. From 20 threads up, N. W.	.....do	.40	
117 *bis.*	Fabrics of the previous item, when they are printed or manufactured of dyed threads—the duties on the fabric, with an additional duty of 30 per cent of the same, N. W.			
118	Smooth and plain fabrics, with or without a nap, weighing less than 10 kilograms to the 100 square meters, unbleached, bleached, or dyed:			
	a. Up to 6 threads, N. W.	.....do	.20	
	b. From 7 to 11 threads, N. W.	.....do	.25	
	c. From 12 to 15 threads, N. W.	.....do	.35	

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS IV.—COTTON AND MANUFACTURES, ETC.—continued.			
	Second group.—Woven fabrics—Continued.			
	Smooth and plain fabrics, etc.—Continued.		*Pesos.*	*Pesos.*
	d. From 16 to 19 threads, N. W.	Kg.....	0 45	0.30
	e. From 20 threads up, N. W.	....do	.58	.40
118 *bis.*	Fabrics of the previous item, when they are printed or manufactured with dyed threads—the duties on the fabric, with an additional duty of 40 per cent of the same, N. W.			
119	Fabrics twilled or embroidered in the loom, with or without a nap, weighing 10 or more kilograms to the 100 square meters, unbleached, bleached, or dyed:			
	a. Up to 6 threads, N. W.	....do	.20	.10
	b. From 7 to 11 threads, N. W.	....do	.24	.12
	c. From 12 to 15 threads, N. W.	....do	.30	.16
	d. From 16 to 19 threads, N. W.	....do	.40	.24
	e. From 20 threads up, N. W.	....do	.50	.35
119 *bis.*	Fabrics of the previous item, when they are printed or manufactured of dyed threads—the duties on the fabric, with an additional duty of 30 per cent of the same, N. W.			
120	Fabrics twilled or embroidered in the loom, with or without a nap, weighing less than 10 kilograms to the 100 square meters, unbleached, bleached, or dyed:			
	a. Up to 6 threads, N. W.	....do	.24	.12
	b. From 7 to 11 threads, N. W.	....do	.30	.16
	c. From 12 to 15 threads, N. W.	....do	.40	.24
	d. From 16 to 19 threads, N. W.	....do	.52	.35
	e. From 20 threads up, N. W.	....do	.65	45
120 *bis.*	Fabrics of the foregoing item, when they are printed or manufactured of dyed threads—the duties on the fabric, with an additional duty of 40 per cent of the same, N. W.			
121	Quilted fabrics, N. W.	....do	.32	.16
122	Piqués of all kinds, N. W.	....do	.60	.30
123	Fabrics with a nap (cardados):			
	a. Unbleached, half bleached, or dyed in the piece, N. W.	.... do	.11	.06
	b. Bleached, printed, or manufactured of dyed threads, N. W.	.....do	.25	.15
124	Velveteens, plushes, and fabrics of triple crimpling (de triple rizo), cut or not, N. W.	.....do	.65	.30
125	Knit fabrics, even when tailor's or milliner's work has been expended upon them:			
	a. In pieces, undershirts, or drawers, N. W.	.....do	.90	.60
	b. In stockings, socks, gloves, and other small articles, N. W.	.....do	1.05	.70
	Knit fabrics having a mixture of other vegetable fibers, of wool or of silk, or of flock silk shall be assessed under the corresponding items of Classes V, VI, and VII, respectively (see Provision IV, rule 7).			
126	Tulles (see Provision IV, rules 9 and 13):			
	a. Plain, N. W.	.....do	1.00	.40
	b. Worked or embroidered in the loom, N. W.	.....do	1.25	.60
127	Laces, blondes, and edgings of all kinds, N. W.	.....do	1.75	1.00
	When they contain a mixture of flax or silk, in any proportion, they shall be assessed, respectively, under the corresponding items of Classes V and VII (see Provision IV, rule 7).			
128	Cotton carpets, N. W.	.....do	.20	.10
129	Fabrics called tapestry, adapted to chairs and curtains, manufactured of threads already dyed, and carpets and bedspreads of the same kind, N. W.	.....do	.40	.25

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment	Discriminating duty.	Revenue duty.
	CLASS IV.—COTTON AND MANUFACTURES, ETC.—continued.			
	Second group.—Woven fabrics—Continued.		*Pesos.*	*Pesos.*
130	Wicks for lamps and candles, N. W.	Kg.....	0.20	0.10
131	Cotton passementerie and ribbons and galloons, N. W. (see Provision IV, rules 9 and 13). Ribbons and galloons containing threads of other vegetable fibers, of wool or of silk, in any proportion, shall be assessed under the corresponding items of Classes V, VI, and VII, respectively (see Provision IV, rule 8).	.....do.....	.70	.35
	CLASS V.—HEMP, FLAX, PITA, JUTE, AND OTHER VEGETABLE FIBERS AND MANUFACTURES OF THE SAME.			
	First group.—Raw and spun.			
132	Hemp, flax, and ramie, raw, hackled, or in tow, G. W.	100 kg.....	.....	2.25
133	Manila, sisal, pita, jute, and other vegetable fibers, raw, hackled, or in tow, G. W.	.....do.....	.....	.80
134	Threads spun with two or more ends (including the weight of the spool) and yarn, N. W. (Pro. VI, rule 9). Thread containing, in any proportion, a mixture of threads of common metal shall be assessed under item 164 of Class VII.	Kg.....	.20	.10
135	Cordage and rigging:			
	a. Pack thread and twine and hemp cord not exceeding 3 millimeters in thickness, N. W.	100 kg	10.20	6.00
	b. Hemp rigging and cordage exceeding 3 millimeters in thickness, N. W.	.....do.....	6.80	6.00
	c. Rigging and cordage of manila, sisal, pita, jute, or other fibers, N. W.	.....do.....	5.20	6.00
	Second group.—Fabrics.			
	NOTE I.—Fabrics assessed under the items of this group shall pay, according to circumstances, the following additional duties, in proportion to the mixture (see Provision IV): (1) Fabrics of hemp, jute, flax, ramie, or pita containing threads of wool, flock wool, or waste of wool, or of hair of any kind, or of waste of the same shall pay an additional duty of 30 per cent of the duties of the item, provided the number of threads of wool, flock wool, waste of wool, hair or waste of hair, counted in the warp and woof, does not exceed the fifth part of the whole number of threads of which the fabric consists. When the number of threads of wool, flock wool or waste of wool, hair or waste of hair exceeds one-fifth of the whole, the fabrics shall be assessed under the corresponding items of Class VI as mixed woolen fabrics. (2) Fabrics of hemp, jute, flax, ramie, or pita containing threads of silk or flock silk shall pay an additional duty of 60 per cent of the duties, provided the number of threads of silk or flock silk, counted in the warp and woof, does not exceed one-fifth of the whole number of threads of which the fabric is composed. If the number of the threads of silk or flock silk exceeds one-fifth of the whole, the fabrics shall be assessed under the corresponding items of Class VII. (3) Fabrics of cotton mixed with hemp, flax, ramie, jute, or other vegetable fibers containing at the same time threads of silk or flock silk shall be assessed under the items of this group (see Provision IV, rule 5, Letter B), with an additional			

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS V.—HEMP, FLAX, PITA, JUTE, ETC.—continued.			
	Second group.—Fabrics—Continued.			
	duty of 60 per cent, provided the number of threads of silk or flock silk, counted in the warp and woof, does not exceed one-fifth of the whole number of threads of which the fabric is composed. When the number of the threads of silk or flock silk exceeds one-fifth, the fabrics shall be assessed under the corresponding items of Class VII.			
	Knit fabrics, tulles, laces, blondes, and edgings (see Provision IV, rule 7), ribbons (Provision IV, rule 8), and passementerie (Provision IV, rule 9) are excepted from the provisions of this note.			
	NOTE II.—The articles of this group shall pay the following additional duties under each of the following circumstances (see Provision IV):			
	A. Fabrics brocaded or flowered with silk or flock silk shall pay an additional duty of 30 per cent of the duties on the fabric.			
	B. Articles embroidered by hand, by machinery other than the loom, or with passementerie worked upon them shall pay an additional duty of 30 per cent of the duties on the fabric. When the embroidery contains threads, cord, or spangles of common metals or of silver, the additional duty shall be 60 per cent of the duties on the fabric. When the threads, cord, or spangles are of gold, the additional duty shall be 100 per cent.			
	C. Fabrics and passementerie containing metal threads or cord of common metals or of silver shall pay an additoinal duty of 50 per cent of the duties on the article. When the threads or cord are of gold, the additional duty shall be 100 per cent.			
	D. Fabrics made up or partly made up into bags shall pay an additional duty of 15 per cent of the duties of the corresponding item.			
	Sheets, towels, tablecloths and napkins, scarfs, veils, shawls, mantelets, and hemmed or hemstitched handkerchiefs shall pay an additional duty of 30 per cent of the duties on the fabric, for the making up.			
	Other made-up goods, ready-made clothing, and wearing apparel of all kinds, finished, unfinished, or merely basted, shall pay, upon their whole weight, the duties on the fabric of which the article is chiefly composed in its most visible external part and an additional duty of 100 per cent.			
	Knit goods specified in the tariff are exempted from the additional duty for making up.			
136	Fabrics of hemp, flax, ramie, jute, or other vegetable fibers not specified, plain, twilled, or damasked, weighing 35 kilograms or more to the 100 square meters, unbleached, half bleached, or dyed in the piece·		*Pesos.*	*Pesos.*
	a. Up to 5 threads, N. W.....	100 kg.....	5.58	2.00
	b. From 6 to 8 threads, N. W	Kg.....	.12	.05
	c. From 9 threads up, N. W.....	.....do	.18	.c8
136 *bis.*	Fabrics of the foregoing item when they are bleached or printed—the duties on the fabric, with an additional duty of 15 per cent of the same, N. W.			
136 *ter.*	The same, when they are manufactured of dyed threads—the duties on the fabric, with an additional duty of 25 per cent, N. W.			

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS V.—HEMP, FLAX, PITA, JUTE, ETC.—continued.			
	Second group.—Fabrics—Continued.			
137	Fabrics, plain, twilled, or damasked, weighing from 20 to 35 kilograms to the 100 square meters, unbleached, half bleached, or dyed in the piece:		*Pesos.*	*Pesos.*
	a. Up to 5 threads, N. W.	Kg	0.13	0.0
	b. From 6 to 8 threads, N. W.	do	.18	.0
	c. From 9 to 12 threads, N. W.	do	.26	.1
	d. From 13 to 16 threads, N. W.	do	.36	.1
	e. From 17 threads up, N. W.	do	.45	.2
137 *bis.*	Fabrics of the foregoing item, when they are bleached or printed—the duties on the fabric, with an additional duty of 25 per cent of the same, N. W.			
137 *ter.*	The same, when they are manufactured of dyed threads—the duties on the fabric, with an additional duty of 40 per cent, N. W.			
138	Fabrics, plain, twilled, or damasked, weighing from 10 to 20 kilograms to the 100 square meters, unbleached, half bleached, or dyed in the piece:			
	a. Up to 8 threads, N. W.	do	.22	.0
	b. From 9 to 12 threads, N. W.	do	.33	.1
	c. From 13 to 16 threads, N. W.	do	.48	.1
	d. From 17 to 20 threads, N. W.	do	.65	.2
	e. From 21 threads up, N. W.	do	.92	.3
138 *bis.*	Fabrics of the foregoing item, when they are bleached or printed—the duties on the fabric, with an additional duty of 30 per cent of the same, N. W.			
138 *ter.*	The same, when manufactured of dyed threads—the duties on the fabric, with an additional duty of 50 per cent, N. W.			
139	Fabrics, plain, twilled, or damasked, weighing less than 10 kilograms to the 100 square meters, unbleached, half bleached, or dyed in the piece:			
	a. Up to 8 threads, N. W.	do	.26	.1
	b. From 9 to 12 threads, N. W.	do	.38	.1
	c. From 13 to 16 threads, N. W.	do	.54	.2
	d. From 17 to 20 threads, N. W.	do	.75	.3
	e. From 21 threads up, N. W.	do	1.20	.6
139 *bis.*	Fabrics of the foregoing item, bleached or printed—the duties on the fabric, with an additional duty of 30 per cent of the same, N. W.			
139 *ter.*	The same, manufactured of dyed threads—the duties on the fabric, with an additional duty of 50 per cent, N. W.			
140	Velvets and plushes of flax, jute, etc., N. W.	do	.36	.2
141	Knit fabrics of flax or hemp, with or without a mixture of cotton or other vegetable fibers, even when tailor's or milliner's (dressmaker's) labor has been expended upon them:			
	a. In pieces, undershirts, or drawers, N. W.	do	1.24	.8
	b. In stockings, socks, gloves, or other small articles, N. W.	do	1.60	1.0
	Knit fabrics containing a mixture of wool or silk or flock silk shall be assessed under the corresponding items of Classes VI and VII, respectively (see Provision IV, rule 7).			
142	Tulles (tulle having a mixture of silk shall be assessed under the corresponding item of Class VII, see Provision IV, rule 7):			
	a. Plain, N. W.	do	1.50	.6
	b. Ornamented (labrados) or embroidered in the loom, N. W.	do	1.85	.7

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS V.—HEMP, FLAX, PITA, JUTE, ETC.—continued.			
	Second group—Fabrics—Continued.		*Pesos.*	*Pesos.*
143	Lace, blondes, and edgings, N. W.	Kg.....	3.60	2.00
	Tulle having a mixture of silk shall be assessed under the corresponding item of Class VII (see Provision IV, rule 7).			
144	Carpets of jute, hemp, or other vegetable fibers, without any mixture of wool, N. W.	.....do	.24	110
145	Fabrics called tapestry, fit for chairs and curtains, with or without a mixture of cotton, whether ornamented or damasked, provided they are manufactured of threads dyed before being woven, and rugs and bedspreads of the same kind, N. W.	.....do	.50	.28
146	Passementerie of hemp, jute, flax, ramie, etc., and ribbons and galloons, N. W. (see Provision IV, rules 9 and 13).	.....do	.75	.40
	Ribbons and galloons containing threads of wool or silk in whatever proportion shall be assessed under the corresponding items of Classes VI and VII, respectively (see Provision IV, rule 8).			
	CLASS VI.—WOOL, BRISTLES, HAIR, AND FURS, AND MANUFACTURES OF THE SAME.			
	First group.—Raw and spun.			
147	Bristles, hair, and furs, G. W.	100 kg....	.....	4.50
148	Raw wool, G.W.	Kg.....	.....	.20
149	Worsted, unbleached, bleached, or dyed, spun or twisted, N. W.	.....do	.50	.40
	Worsted having a mixture of silk shall be assessed in accordance with the following provisions: Up to a fifth part, it shall pay an additional duty of 45 per cent of the duties of the item; up to three-fifths, it shall pay an additional duty of 100 per cent of the duties of the item; from three-fifths up, the worsted shall pay duty as floss silk.			
	Second group.—Woven and empastados.			
	NOTE I.—Fabrics assessed under the items of this group shall pay an additional duty, according to circumstances, in proportion to the mixture (see Provision IV), as follows: (1) Fabrics of wool or hair, containing threads of silk or flock silk shall pay an additional duty of 45 per cent of the duties of the item, provided the number of threads of silk or flock silk, counted in the warp and woof, does not exceed one-fifth of the whole number of threads of which the fabric is composed. When the number of threads of silk or flock silk exceeds the fifth part of the whole, the fabrics shall be assessed under the corresponding items of Class VII. (2) Mixed fabrics of wool and cotton, or of wool and other vegetable fibers containing at the same time threads of silk or flock silk shall be assessed under the items of this group (Provision IV, rule 5, Letter A), with an additional duty of 45 per cent, provided the number of threads of silk or flock silk, counted in the warp and woof, does not exceed the fifth part of the whole number of threads of which the fabric is composed. When the number of the threads of silk or flock silk exceeds the fifth part, the fabrics shall be assessed under the corresponding items of Class VII. Knit fabrics, and tulle, lace, blondes, and edgings (see Provision IV, rule 7), ribbons (Provision IV, rule 8), and passementerie (Provision IV, rule 9) are excepted from the provisions of this note.			

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS VI.—WOOL, BRISTLES, HAIR, AND FURS, ETC.—continued.			
	Second group.—Woven and empastados—Continued.			
	NOTE II.—Articles of this group shall pay additional duties under each of the following circumstances (see Provision IV), as follows:			
	A. Fabrics brocaded or flowered with silk or flock silk shall pay an additional duty of 20 per cent of the duties on the fabric.			
	B. Articles embroidered by hand, by machinery other than the loom, or with passementerie worked upon them shall pay an additional duty of 40 per cent of the duties on the fabric. When the embroidery contains threads, cord, or spangles of common metals or of silver, the additional duty shall be 60 per cent of the duties on the fabric. When the threads, cord, or spangles are of gold, the additional duty shall be 100 per cent.			
	C. Fabrics and passementerie containing metal threads or cord of common metals or of silver shall pay an additional duty of 50 per cent of the duties on the article. When the threads or cord are of gold, the additional duty shall be 100 per cent.			
	D. Cloaks, shawls, mantelets, felt saddlecloths, traveling blankets and edged blankets, quilts, or covers (even when the edging is of silk ribbon, provided the width of the ribbon does not exceed 2 centimeters) shall pay an additional duty of 30 per cent of the duties on the fabric, for the making up. Other made-up goods, ready-made clothing, and wearing apparel of all kinds, finished, partly finished, or merely basted, shall pay, upon their whole weight, the duties on the fabric of which the article is chiefly composed in its most visible external part and an additional duty of 100 per cent.			
	Knit goods specified in the tariff are exempted from the additional duty for the making up.		*Pesos.*	*Pesos.*
150	Coating (bayeton) of pure or mixed wool, N. W.	Kg.	0.20	0.06
151	Baize:			
	a. Of pure wool, N. W.	do	.30	.10
	b. Of mixed wool, N. W.	do	.22	.08
152	White or colored flannel for underclothing:			
	a. Of pure wool, N. W.	do	.60	.30
	b. Of mixed wool, N. W.	do	.45	.15
153	Blankets of pure wool or of wool with a mixture of other materials:			
	a. Gray blankets (mantas pardas), N. W.	do	.20	.06
	b. Other kinds, N. W.	do	.33	.10
154	Astrakhans, plushes, and velvets of pure or mixed wool, N. W.	do	1.00	.30
155	Cloths and other fabrics, not specified, of wool, hair, or flock, whether classed as cloths or not, weighing 300 or more grams to the square meter:			
	a. Of wool, hair, or flock, without mixture, N. W.	do	1.24	.40
	b. Of wool or hair, with a mixture, N. W.	do	.85	.25
156	The same fabrics, weighing from 175 to 300 grams to the square yard:			
	a. Of wool, hair, or flock, without mixture, N. W.	do	1.56	.50
	b. Of wool or hair, with a mixture, N. W.	do	1.15	.35
157	The same fabrics, weighing less than 175 grams to the square meter:			
	a. Of wool, hair, or flock, without mixture, N. W.	do	1.75	.60
	b. Of wool or hair, with a mixture, N. W.	do	1.35	.45

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS VI.—WOOL, BRISTLES, HAIR, AND FURS, ETC.—continued.			
	Second group.—Woven and empastados—Continued.		*Pesos.*	*Pesos*
158	Fabrics of hair, with or without a mixture of cotton or other vegetable fiber, N. W.	Kg.....	0.75	0.40
159	Knit fabrics with or without a mixture of cotton or other vegetable fibers, even if tailor's or dressmaker's work has been expended upon them:			
	a. In pieces, undershirts, or drawers, N. W.....	.....do	1.40	.90
	b. In stockings, socks, gloves, or other small articles, N. W.	.....do	2.00	1.10
	Knit fabrics containing a mixture of silk shall be assessed under the corresponding item of Class VII (see Provision IV, rule 7).			
160	Carpets of pure wool or with a mixture of other materials:			
	a. De rizo, uncut, N. W.....	.....do	.38	.16
	b. Piled or cut, N. W.....	.....do	.45	.20
161	Fabrics called tapestry, fit for curtains and chairs, of pure wool or of wool mixed with cotton or other vegetable fibers, whether flowered or damasked, provided they weigh more than 350 grams to the square meter, and rugs and quilts of the same class, N. W.	.....do	.75	.60
162	Felts of pure or mixed wool, N. W.....	.....do	.23	.12
163	Woolen passementerie and ribbons and galloons (see Provision IV, rules 9 and 13), N. W.....	.....do	.98	.45
	Ribbons and galloons containing silk threads, in any proportion, shall be assessed under the corresponding items of Class VII (Provision IV, rule 8).			
	CLASS VII.—SILK AND MANUFACTURES OF SILK.			
	First group.—Spun goods.			
164	Silk and flock silk, spun or twisted, in hanks, N. W.....	.....do	2.25	2.25
	Thread of any textile fiber containing a mixture, in any proportion, of common metals shall be assessed under this item. Thread containing a mixture of gold or silver shall be assessed under the corresponding items of the first group of Class II.			
165	Silk on reels, including the weight of the reels, N. W. (Pro. VI, rule 9).	.....do	1.20	.80
	Second group.—Woven goods.			
	NOTE I.—Fabrics of this group shall be regarded as fabrics of unmixed silk whenever the number of threads of silk or flock silk, counted in the warp and woof, exceeds one-half of the whole number of threads of which the fabric is composed (Provision IV, rule 6).			
	Knit fabrics, tulle, lace, blonde, and edgings are excepted from the foregoing rule; also, ribbons and galloons the width of which does not exceed 15 centimeters. These articles shall be assessed as fabrics of mixed silk, under the items to which they belong as such, whenever they contain threads of cotton or other vegetable fibers or of wool or flock wool, in whatever proportion such threads occur in the mixture (Provision IV, rules 7 and 8).			
	NOTE II.—Articles of this group shall pay the following additional duties under each of the following circumstances (see Provision IV):			
	A. Articles embroidered by hand, by machinery other than the loom, or having passementerie worked upon them shall pay an additional duty of 50 per cent of the duties on			

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS VII.—SILK AND MANUFACTURES OF SILK—continued.			
	Second group.—Woven goods—Continued.			
	the fabric. If the embroidery contains threads, cord, or spangles of common metals or of silver, the additional duty shall be 60 per cent of the duties on the fabric. If the threads, cord, or spangles are of gold, the additional duty shall be 100 per cent.			
	B. Fabrics and passementerie containing metal threads or cord (canutillo) of common metals or of silver shall pay an additional duty of 50 per cent of the duties on the article. Where the threads or cord are of gold, the additional duty shall be 100 per cent.			
	C. Cloaks, manila handkerchiefs, coverlets, quilts, shawls, veils, mantillas, mantelets, and hemmed or hemstitched handkerchiefs shall pay an additional duty of 30 per cent of the duties on the fabric for the making up. Other made-up goods, ready-made clothing, and wearing apparel of all kinds, finished, partly finished, or simply basted, shall pay, upon their whole weight, the duties upon the fabric of which the article is chiefly composed in its most visible external part and an additional duty of 100 per cent.			
	Knit goods specified in the tariff are exempted from the additional duty for making up.		*Pesos.*	*Pesos.*
166	Fabrics of raw silk, N. W.	Kg.....	2.80	1.04
167	Fabrics of silk or flock silk, without any mixture, plain, without ornament (llanos, twilled, or asargados):			
	a. Black, N. W.	.....do	3.80	3.80
	b. In colors, N. W.	.....do	4.85	4.85
	Fabrics in which black threads are combined with colored threads shall be regarded as colored.			
168	Fabrics of silk or flock silk, without mixture, flowered, plushed, or velveted, N. W.	.....do	6.00	4.40
169	Fabrics of silk or flock silk, with a mixture, plain, unornamented, twilled, or asargados:			
	a. When the mixture is of cotton or some other vegetable fiber, N. W.	.....do	2.50	2.20
	b. When the mixture contains wool or hair, N. W.	.....do	3.00	2.40
170	Fabrics of silk or flock silk, flowered, plushed, or velveted, N. W.	.....do	4.00	3.00
171	Fabrics of network of boiled (cocida) silk, raw (unbleached) silk, or flock silk, in all kinds of articles:			
	a. Of unmixed silk, N. W.	.....do	5.00	3.50
	b. When there is a mixture of other textile materials, N. W.	.....do	4.00	3.00
172	Tulle of silk or flock silk, pure or mixed:			
	a. Plain, N. W.	.....do	3.60	2.40
	b. Flowered or embroided in the loom, N. W.	.....do	4.50	3.00
173	Lace, edging, and blonde of silk or flock silk, plain or flowered:			
	a. Unmixed, N. W.	.....do	8.00	6.00
	b. Mixed with cotton or other vegetable fibers, N. W.	.....do	6.00	4.00
174	Silk passementerie (see Provision IV, rules 9 and 13)	.....do	2.50	.60
	CLASS VIII.—PAPER AND ITS APPLICATIONS.			
	First group.			
175	Paper pulp, G. W.	100 kg.....	.....	.25
	This item shall be applied only to such pulp as comes perforated in such a manner that it can not be used for any			

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS VIII.—PAPER AND ITS APPLICATIONS—continued.			
	other purpose than the manufacture of paper or pasteboard. When the pulp is presented unperforated, the customs authorities shall, at the expense of the parties concerned, break up the sheets in such a way that they can only be used for such manufacture. Pulp not perforated shall pay duty as ordinary pasteboard.			
	Second group.—Printing and writing paper.			
176	Continuous paper, white or colored, uncut:		*Pesos.*	*Pesos.*
	a. Weighing 35 grams or less to the square meter, T. (Pro. VI, rule 5).	100 kg.....	6.00	2.00
	b. Weighing from 35 to 50 grams, T. (Pro. VI, rule 5).....	.....do	2.80	1.00
	c. Weighing 50 grams or more, T. (Pro. VI, rule 5).....	.....do	4.50	1.50
177	Continuous paper of any weight, white or colored, cut, made by hand, ruled with pencil or ink, and envelopes, T. (Pro. VI, rule 5). Envelopes of all kinds shall pay an additional duty of 50 per cent of the duties of the item, including the weight of the inside packing. Letter paper put up in boxes, whether fancy or not, shall likewise pay the additional duty of 50 per cent, including the weight of the boxes.	.....do	12.60	3.50
	Third group.—Printed, engraved, and photographed paper.			
178	Books, bound or unbound, and other printed matter:			
	a. In the Spanish language, T. (Pro. VI, rule 5).....	.....do	12.00	2.50
	b. In a foreign language, T. (Pro. VI, rule 5).....	.....do	.....	2.50
	The bindings of books shall be assessed under the items to which their materials belong. If the books are bound in boards, they shall pay duty as printed matter on their whole weight.			
179	Stamped paper, blank invoices, labels, cards, and other like articles, T. (Pro. VI, rule 5).	Kg.....	.15	.05
180	Prints, maps, drawings, photographs, and engravings, and prints, lithographs, chromolithographs, oleographs, etc., on marks for tobacco and other articles:			
	a. Of a single color, T. (Pro. VI, rule 5).....	.....do	.15	.05
	b. Of two or three colors, T. (Pro. VI, rule 5).....	.....do	.30	.20
	c. Of more than three colors, T. (Pro. VI, rule 5).....	.....do	.80	.40
	Fourth group.—Paper for decorating rooms (wall paper).			
181	Paper, printed:			
	a. On the natural ground, T. (Pro. VI, rule 5).....	100 kg.....	5.50	2.50
	b. On a glazed (mate) or bright ground, T. (Pro. VI, rule 5).	.....do	9.00	3.00
	c. With gold, silver, wool, or crystal, T. (Pro. VI, rule 5)..	Kg.....	.35	.10
	Fifth group.—Cardboard and miscellaneous paper.			
182	Brown paper, common packing paper, and sandpaper, T. (Pro. VI, rule 5).	100 kg.....	2.70	.80
183	Thin paper of dirty pulp, for wrapping fruit, T. (Pro. VI, rule 5).	.....do	3.60	1.00
184	Other paper not specified, T. (Pro. VI, rule 5).....	.....do	7.20	2.00
185	Cardboard in sheets:			
	a. Pasteboard and fine glazed or pressed cardboard, T. (Pro. VI, rule 5).	.....do	5.50	1.50
	b. Other cardboard, T. (Pro. VI, rule 5).....	.....do	1.75	.35

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS VIII.—PAPER AND ITS APPLICATIONS—continued.			
	Fifth group.—Cardboard, etc.—Continued.			
			Pesos.	*Pesos.*
186	Pasteboard in manufactured articles:			
	a. In boxes lined with common paper, T. (Pro. VI, rule 5)..	100 kg.....	1.75	0.35
	b. In boxes with ornaments or lined with fine paper.....	Kg.....	.35	.10
	c. In articles not specified, T. (Pro. VI, rule 5).....	.....do	.25	.10
187	Pasta y carton piedra:			
	a. In moldings and unfinished articles, T. (Pro. VI, rule 5).	100 kg.....	1.50	.50
	b. In finished articles, T. (Pro. VI, rule 5).....	Kg.....	.20	.10
	CLASS IX.—WOOD AND OTHER VEGETABLE MATERIALS EMPLOYED IN INDUSTRIES AND MANUFACTURES OF THE SAME.			
	First group.—Woods.			
188	Staves, G. W.....	1,000.....	.....	2.00
189	Common wood:			
	a. In boards, planks, beams, joists, spars, and timber for naval construction, G. W.	C. M.....	.....	1.00
	b. Planed or tongued and grooved for boxes or floors, broomsticks, and boxes in which imported articles are packed, G. W.	100 kg.....	.....	.40
190	Fine wood for cabinetwork:			
	a. In boards, planks, blocks, or pieces, G. W.....	.....do	.....	3.00
	b. Sawed in sheets, T. (Pro. VI, rule 5).....	.....do	.....	4.35
191	Barrels:			
	a. Put together, G. W.....	.....do	1.60	.....
	b. Not put together, and the hoops and headings, G. W...	.....do	.....	.90
192	Wood in shooks (cortes) for hogsheads and casks for sugar and honey, G. W.	.....do	.....	.15
193	Trellises and fences, G. W.....	.....do	.....	1.50
	Second group.—Furniture and manufactured articles.			
194	Common wood in articles of carpenter's work and in all kinds of articles, whether turned, painted, or varnished or not, but without any carving, inlaid work, or sculpture, T. (Pro. VI, rule 5).	.....do	7.50	2.00
195	Fine wood worked into furniture or other articles, whether turned, polished, or varnished or not, furniture and articles of common wood veneered with fine woods, and furniture hung with tapestry (except with fabrics of silk or mixtures of silk or with hair), provided the articles enumerated in this item are not carved or sculptured and have no inlaid work or metal ornaments, T. (Pro. VI, rule 5). Brushes of hair or bristles, with wooden handles, shall be assessed under this item, with an additional duty of 50 per cent of the duties.	.....do	18.00	12.00
196	Furniture of curved wood, T. (Pro. VI, rule 5).....	.....do	14.00	10.00
197	Listones:			
	a. Molded, varnished, or prepared for gilding, T. (Pro. VI, rule 5).	.....do	7.00	3.00
	b. Gilt or carved, T. (Pro. VI, rule 5).....	Kg.....	.35	.15
198	Wood of all kinds in furniture or other articles, gilt, carved, sculptured, inlaid, or covered with mother-of-pearl or other fine materials or with metal ornaments, and furniture tapestried with fabrics of silk or mixtures of silk or with fur, N. W.	.....do	.75	.60

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS IX.—WOOD AND OTHER VEGETABLE MATERIALS, ETC.—ct'd.			
	Third group.—Miscellaneous.		*Pesos.*	*Pesos.*
199	Coal, wood, and other vegetable combustibles	1,000 kg.		3.00
200	Cork:			
	a. In the rough or in sheets, G. W.	100 kg.	1.40	1.40
	b. Worked, T. (Pro. VI, rule 5)	do	6.00	3.00
201	Rushes, vegetable hair, junco, osier, fine straw, palm leaf and broom in the rough, feather grass in the rough, and feather grass worked into baskets and other common articles, G. W. Baskets in which imported goods are packed shall be assessed under this item, with a deduction of 60 per cent of the duties.	do	2.60	1.05
202	Feather grass in fine manufactures, and rushes, vegetable hair, junco, osier, palm straw, and broom, in all kinds of articles not specified in the tariff, T. (Pro. VI, rule 5).	do	16.25	10.00
	CLASS X.—ANIMALS AND THEIR PRODUCTS EMPLOYED IN INDUSTRIES.			
	First group.—Animals.			
203	Horses and mares:			
	a. Those above the standard height	One		50.00
	b. Others	do		27.00
204	Mules	do		20.00
205	Donkeys	do		1.00
206	Cattle:			
	a. Oxen	do		8.00
	b. Cows	do		7.00
	c. Calves and heifers	do		6.00
207	Hogs	do		5.00
208	Sheep and goats and animals not specified in the tariff	do		1.50
209	Pet birds	do		.20
	Second group.—Skins (furs), leather, and manufactures of leather.			
210	Ornamental skins in the natural state or dressed, G. W.	Kg.	1.50	1.50
211	Skins in the rough or untanned, G. W. Wet salted skins shall be allowed a rebate of 60 per cent of the duties for the salt and moisture. Dry salted skins shall be allowed a rebate of 30 per cent of the duties.	do	.05	.03
212	Skins tanned with the hair on, G. W.	do	.25	.25
213	Skins tanned without the hair:			
	a. Cow skins and other large skins, entire, G. W.	do	.20	.15
	b. Other skins and large skins in crupones, G. W.	do	.28	.20
214	Dressed skins, dyed or not:			
	a. Sheepskins, T. (Pro. VI, rule 5)	do	.35	.20
	b. Calfskins and goatskins, T. (Pro. VI, rule 5)	do	.40	.25
	c. Kidskins, lambskins, and the skins of young calves, T. (Pro. VI, rule 5).	do	.50	.40
	d. Cow skins and other large skins, entire, T. (Pro. VI, rule 5).	do	.25	.15
	e. Large skins in crupones, and skins not specified, T. (Pro. VI, rule 5). Strips for shoes or other articles shall pay an additional duty of 30 per cent of the duties of the item.	do	.35	.20
215	Japanned, satined, granulated, and sized skins, and those which have drawings, engravings, or embossing on them, T. (Pro. VI, rule 5). Strips for shoes or other articles shall pay an additional duty of 30 per cent of the duties of the item.	do	.64	.50

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS X.—ANIMALS AND THEIR PRODUCTS, ETC.—continued.			
	Second group.—Skins (furs), leather, etc.—Continued.		*Pesos.*	*Pesos.*
216	Skins of all kinds in imitation of chamois or parchment and gilt and bronzed skins, T. (Pro. VI, rule 5). Strips for shoes or other articles shall pay an additional duty of 30 per cent of the duties of the item.	Kg.....	0.70	0.60
217	Skin gloves, T. (Pro. VI, rule 5).....	.....do	3.50	3.50
218	Shoes of cured leather and the like:			
	a. For men.....	Dozen....	3.75	2.20
	b. For women.....	.....do	3.00	1.90
219	Patent-leather shoes and the like:			
	a. For men.....	.....do	4.42	2.30
	b. For women.....	.....do	3.64	2.10
220	Calfskin bottines, with elastics, or brogans:			
	a. For men.....	.....do	6.76	3.80
	b. For women.....	.....do	5.00	2.40
221	Bottines of patent leather and the like:			
	a. For men.....	.....do	7.50	4.50
	b. The same for women and polacas.....	.....do	8.50	5.00
222	All other expensive foot wear.....	.....do	10.00	6.00
223	Riding boots.....	Pair.....	3.00	2.00
224	Hempen sandals ..... Shoes of less than 18 centimeters in length, measured on the inside of the sole, shall be allowed a rebate of 40 per cent of the duties.	Dozen....	.60	.20
225	Harness makers' and belt makers' goods, and valises, hat-boxes, and gripsacks of pasteboard and skin, T. (Pro. VI, rule 5).	Kg.....	.35	.20
226	Other articles made of skin (piel) or lined with skin, T. (Pro. VI, rule 5).	.....do	.75	.40
	Third group.—Miscellaneous.			
227	Ornamental feathers, in their natural state or manufactured, N. W.	.....do	.....	4.00
228	Other feathers and feather dusters, T. (Pro. VI, rule 5).....	.....do	.70	.40
229	Dried gut, N. W.....	.....do	3.00	2.00
230	Products (despojos) not enumerated, not manufactured, G. W.	100 kg.....	.....	1.00
	CLASS XI.—INSTRUMENTS, MACHINES, AND APPARATUS EMPLOYED IN AGRICULTURE, INDUSTRIES, AND TRANSPORTATION.			
	First group.—Instruments.			
231	Pianos:			
	a. Grand pianos.....	One.....	75.00	40.00
	b. Others ..... The cases, with their chords (encordaduras) shall pay the duties of the item, even when they do not come accompanied by the other pieces which together constitute the instrument.	.....do	54.00	30.00
232	Harmoniums and organs, N. W.....	100 kg.....	30.00	20.00
233	Harps, violins, violoncellos, guitars, and bandores with incrustations, flutes and flageolets of the ring system, metal instruments of 6 or more keys, and separate pieces of wood or copper for wind instruments, N. W.	Kg.....	.80	.80
234	Other musical instruments, N. W	.....do	.35	.35
235	Watches:			
	a. Gold watches and chronometers.....	Each.....	.....	3.00
	b. Silver watches and watches of other metals.....	.....do	.....	1.00
236	Clocks with weights and alarm clocks.....	.....do	.40	.40

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS XI.—INSTRUMENTS, MACHINES, ETC.—continued.			
	First group.—Instruments—Continued.		*Pesos.*	*Pesos.*
237	Works of wall or mantel clocks, finished, whether in the case or not. Extra pieces shall be assessed under item 47 if they are of steel. Those of other metals or alloys shall be assessed under the item to which their materials belong. Cases, pedestals, lanterns (fanales), and other accessories shall be assessed as manufactured (labrados) articles under the item to which their material belongs. The works of wall and mantel clocks in an unfinished state shall be assessed under item 64. Works in an unfinished state (en desbaste) are those which are worked roughly and with the file, without the escapements, and to which the hairspring (minuteria) is not attached, and in which the last wheel is untoothed. When the clock works come in the cases, pedestals, etc., and the importer does not wish to separate them for examination, the weight of the works and dial shall be held to be 1 kilogram and the rest shall be assessed in the manner prescribed in the preceding clause.	Each.....	0.80	0.80
	Second group.—Apparatus and machines.			
238	Basculas, G. W.....	100 kg.....	3.80	1.60
239	Machines and apparatus for the manufacture of sugar or brandy, G. W. There shall be assessed under this item— (1) The following articles, whoever the importer may be: Platforms and basculas for weighing sugar cane, complete machines of all kinds for grinding sugar cane, steam crushers; diffusion apparatus, complete; defecators, clarifiers, troughs (estanques) for cane juice or honey, filters with their machines; Jamaica batteries (trenes), complete; furnaces for animal coal, steam dryers, centrifugals with their machines; bombonas, cachimbas, skimmers, distributors (repartidoras), and molds for sugar; vacuum kettles, their machinery and tubes, and the copper or iron keys; polarimeters. (2) The following articles, when imported directly by the planters, who must furnish proof that they have been placed upon their estates: Steam plows, stills; donkey engines (donkis), with or without a pump; gasometers for lighting mills, materials for portable railroads, carts (wagons) for the transportation of sugar cane and mill products.	.....do.....	.....	.50
240	Agricultural machines and apparatus, G. W..... The machines and apparatus to which this item applies are those used by the farmer or laborer to prepare the land and to gather the products, and also those used to clean them or prepare them without making any material change in their natural form.	.....do	.....	.80
241	Steam motor machines, stationary, G. W.....	.....do	.....	3.75
242	Machinery for vessels, steam pumps, hydraulic motors and motors worked by petroleum, gas, or compressed or hot air, G. W. In assessing under the foregoing items 239, 240, 241, and 242, it must be remembered: (*a*) That the machines must be complete; the flues, belts, etc., forming an integral part of the machine must be regarded as included in the complete machine, but not extra pieces.	.....do	.....	5.00

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS XI.—INSTRUMENTS, MACHINES, ETC.—continued.			
	Second group.—Apparatus and machines—Continued.			
	(*b*) That the separate or extra pieces must be assessed under item 246 when they are of copper and under item 250 in other cases.			
	(*c*) That the machines, in order to be considered complete, must be imported in a single shipment. The duties of items 246 and 250 must be applied to those imported in two or more shipments, except in the case of special and previous permission, which may be granted by the intendancy of finance.			
243	Boilers:		*Pesos.*	*Pesos.*
	a. Plate boilers (calderas de chapa), G. W.	100 kg.		3.00
	b. Tubular, G. W.	do		3.75
244	Locomotives and locomóbiles, G. W.	do		4.50
245	Turntables, transshipping cars, and hydraulic cranes and columns, G. W.	do		1.50
246	Machines of copper or its alloys, and separate pieces of the same metals, G. W.	do	13.50	13.50
	Machines and loose (separate) pieces made of copper or its alloys with a mixture of other materials shall likewise be assessed under this item, provided the copper or its alloys predominate in the weight.			
247	Dynamo-electrical machines:			
	a. Those weighing more than 50 kilograms, G. W.	do	8.80	8.80
	b. Those weighing 50 kilograms or less, and the inductors (inductores) and separate pieces, G. W.	do	13.50	15.00
248	Sewing machines and separate pieces of the same, G. W.	do		4.00
249	Bicycles	Each	2.00	4.00
250	Machines and machinery of other kinds, or of materials not specified, and separate pieces of all kinds that are not of copper or its alloys, G. W.	100 kg.	7.50	2.30
	Duplicate sleeves and filters of wool for machines included in items 239 and 240 shall be assessed as separate pieces under this item, provided it is proved for what industry, factory, or mill they are intended. In the assessment of pieces of machinery, the following rules must be borne in mind:			
	(1) By a separate piece of machinery is meant every article not expressly included in any item of the tariff, and which, from its shape and the circumstances under which it is presented at the custom-house, can only be used to form part of a machine which, when it comes in a complete state, would be assessed under one of the items of machinery in the tariff.			
	(2) Pipes (tubes), rods, axles, screws, sheets, plates, wire, and other articles specified in the tariff must always be assessed under those items in which they are included, even when they are intended for machinery.			
	(3) Implements, tools, and utensils employed in the arts, agriculture, or industries must not be regarded as separate pieces of a machine, but must pay the duties of the items to which the materials of which they are made belong.			
	Third group.—Vehicles.			
	Carriages and other vehicles (except those used for the conveyance of goods) imported unpainted (en blanco) or ready for lining (vestir) or painting shall be assessed under the corresponding item of their class, with a rebate of 40 per cent, provided they are not lined or painted.			

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS XI.—INSTRUMENTS, MACHINES, ETC.—continued.			
	Third group.—Vehicles—Continued.			
251	Coaches and landaus (berlins), new, used, or repaired:		*Pesos.*	*Pesos.*
	a. With four seats and dogcarts (carretelas) with two seats (tableros).	Each.....	150.00	100.00
	b. With two seats, with or without a folding seat, omnibuses with more than 15 seats, and diligences.	.....do.....	125.00	80.00
	c. With two or four wheels, without tableros, with or without capotas, whatever the number of seats, omnibuses up to 15 seats, and carriages not specified.	.....do.....	80.00	50.00
252	Cars of all kinds for travelers on railroads, and finished pieces of wood for the same, N. W.	100 kg....	.....	4.80
253	Freight cars (wagones), trucks (furgones), and wagonettes of all kinds for railroads, wagonettes for mines, and finished pieces of wood for the same, N. W.	.....do.....	.....	2.10
254	Cars of all kinds for tramways and finished pieces of wood for the same, N. W.	.....do.....	.....	7.60
255	Wagons and carts, N. W.....	.....do.....	.....	3.80
	Fourth group.—Vessels.			
	In the duties on vessels are included the duties on the anchors, grapnels, cables, chains, barometer, chronometer, binnacle, movable and stationary compasses, speaking trumpets, telescopes, casks, ropes, sails and spars necessary for the working and security of the vessel, taking its class into consideration. Other articles shall pay the duties to which they are subject. The duties on steam vessels shall be assessed upon the whole number of tons shown by the admeasurement, without collecting separate duties on machinery, which shall be regarded as an integral part of the vessel. The certificate of admeasurement shall serve temporarily as the basis for the assessment of vessels imported from abroad. The parties interested shall, at the proper time, present a certificate of the naval commandant showing that the above certificate has been approved by the inspector, it being understood that the customs authorities will not consider the assessment or payment of the duties final until such approval has been shown, and the approval must appear in the declaration or document on the subject. Vessels which have been lengthened in a foreign port shall pay duty on the number of tons added. For vessels which have changed their engines abroad, as the weight of the engines can not be proved, $6 shall be paid for every indicated horsepower of steam as a revenue duty. Vessels which have changed their steam generators abroad, including the chimneys, pipes, etc., shall pay $3 per meter of heating surface as a revenue duty. In the case of other repairs which vessels may have undergone abroad, the duties on the materials employed shall be collected.			
256	Vessels of all kinds for sailing exclusively	Ton.....	.....	3.00
257	Steam vessels:			
	a. With wooden hull	.....do.....	.....	4.00
	b. With hull of iron or other metals or of mixed construction.	.....do.....	.....	5.00
258	Parts (despojos) of wrecks.....	Appraisement.	.....	8 per cent.

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS XII.—PROVISIONS.			
	First group.—Meats, fish, lard, and butter.		*Pesos.*	*Pesos.*
259	Living or dead birds and small game, N. W.	Kg		0.10
260	Corned meat, G. W.—T. (Pro. VI, rule 4)	100 kg	2.50	3.00
261	Pork and lard, including bacon, T. (Pro. VI, rule 5)	do	4.50	6.30
262	Jerked beef, G. W.	do		3.96
263	Meat of other kinds, T. (Pro. VI, rule 5)	do	3.50	3.60
264	Butter, T. (Pro. VI, rule 5)	do	8.80	4.40
265	Codfish and stockfish (pezpalo), G. W.—T. (Pro. VI, rule 4)	do		2.50
266	Fresh, salted, smoked, and pickled fish, including the weight of the salt or brine, G. W.	do	1.80	
267	Oysters of all kinds and dried or fresh shellfish, G. W.	do		2.00
	Second group.—Cereals.			
268	Rice, hulled or unhulled, T. (Pro. VI, rule 5)	do	2.12	1.20
269	Wheat, G. W.	do	1.80	1.20
270	Other cereals, G. W.	do	1.20	1.20
	Sprouting or sterilized barley used in the manufacture of beer is exempt from the revenue duty temporarily established.			
271	Flour:			
	a. Wheat flour, T. (Pro. VI, rule 5)	do	2.45	1.50
	b. Rice flour, T. (Pro. VI, rule 5)	do	1.75	2.00
	c. Flour of other cereals, T. (Pro. VI, rule 5)	do	1.75	1.50
	In order to determine whether the products presented for assessment are flour or grits, a sample shall be subjected to the test of the No. 80 sieve, to wit, that which has, in the silk stuff of which it is made, 80 openings (claros) in a square inch of 27 millimeters. If the product passes through the seive, it shall be classed as flour; otherwise, as grits.			
	Third group.—Vegetables, garden stuff, and fruits.			
272	Dried vegetables, G. W.	do	1.30	1.30
273	Garden stuff and fresh vegetables, G. W.	do	.75	.75
274	Flour of vegetables, T. (Pro. VI, rule 5)	do	1.75	2.60
275	Fruits:			
	a. Fresh, T. (Pro. VI, rule 5)	do	2.00	1.00
	b. Dried or desiccated, T. (Pro. VI, rule 5)	do	3.00	1.75
	Fourth group.—Seeds and feed.			
276	Carobs and seeds not specified, G. W.	do	.60	.20
277	Feed and bran, G. W.	do	.60	.25
	Fifth group.—Conserves.			
	All conserves shall be assessed including the weight of the inner packing (see Provision VI, rule 5).			
278	Fish and shellfish preserved in oil or in any other way, in tins, T. (Pro. VI, rule 5).	do	10.50	1.50
279	Garden stuffs and vegetables, pickled or preserved in any manner, T. (Pro. VI, rule 5).	do	12.00	1.40
280	Fruits, preserved:			
	a. In brandy, T. (Pro. VI, rule 5)	Kg	.14	.06
	b. In other ways, T. (Pro. VI, rule 5)	do	.12	.05
281	Preserved food not specified, embutidos, truffles, sauces, and mustard, T. (Pro. VI, rule 5).	do	.20	.10
	Sixth group.—Oils and beverages.			
282	Olive oil:			
	a. In earthenware or tin, G. W.—T. (Pro. VI, rule 4)	100 kg	4.40	2.35
	b. In bottles, including the weight of the bottles, G. W.—T. (Pro. VI, rule 4).	do	7.00	3.00

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS XII.—PROVISIONS—continued.			
	Sixth group.—Oils and beverages—Continued.		*Pesos.*	*Pesos.*
283	Alcohol and brandy, S. T. (Pro. VI, rule 14)	Hectol...	6.00	8.00
284	Liquors, cognac, and other prepared brandies:			
	a. In wooden vessels, S. T. (Pro. VI, rule 14)	.....do	9.00	12.00
	b. In bottles or flasks, S. T. (Pro. VI, rule 14)	.....do	14.00	20.00
285	Sparkling wines, S. T. (Pro. VI, rule 15)	Liter	.75	.10
286	Strong (generous) wines:			
	a. In casks or other wooden vessels, S. T. (Pro. VI, rule 15).	.....do	.15	.03
	b. In bottles, S. T. (Pro. VI, rule 15)	.....do	.30	.06
287	Other wines:			
	a. In casks or other wooden vessels, S. T. (Pro. VI, rule 15).	Hectol...	3.00	1.50
	b. In bottles, S. T. (Pro. VI, rule 15)	.....do	10.00	3.00
288	Beer and cider:			
	a. In wooden vessels, S. T. (Pro. VI, rule 16)	.....do	4.50	1.00
	b. In bottles, S. T. (Pro. VI, rule 16)	.....do	6.30	1.40
	Seventh group.—Miscellaneous.			
289	Saffron, safflower, and tobar, N. W	Kg.....	4.40	3.50
290	Cinnamon of all kinds, T. (Pro. VI, rule 5)	.....do	.50	.25
291	Bastard cinnamon, cloves, pepper, and nutmegs, T. (Pro. VI, rule 5).	.....do.....	.10	.07
292	Vanilla, T. (Pro. VI, rule 5)	.....do	.....	.50
293	Tea, T. (Pro. VI, rule 5)	.....do	.....	.80
294	Coffee in the grain or ground, chicory, and chicory root, T. (Pro. VI, rule 5).	100 kg.....	8.75	3.40
295	Cocoa of all kinds in the grain, ground, or in paste, and cocoa butter, T. (Pro. VI, rule 5).	.....do	15.25	5.00
296	Chocolate and sweetmeats of all kinds, including the inner packing, T. (Pro. VI, rule 5).	Kg.....	.28	.07
297	Eggs, T. (Pro. VI, rule 5)	100 kg.....	8.00	6.00
298	Pastes and fecula, for soups and food, T. (Pro. VI, rule 5)	.....do	4.00	2.00
299	Biscuit (crackers):			
	a. Common, T. (Pro. VI, rule 5)	.....do	3.00	.70
	b. Fine, of all kinds, including the inner packing, T. (Pro. VI, rule 5).	.....do	9.25	3.80
300	Cheese, including the inner packing	Kg.....	.12	.....
	CLASS XIII.—MISCELLANEOUS.			
301	Fans:			
	a. With ribs of bamboo, cane, or other kind of wood, T. (Pro. VI, rule 5).	.....do	.60	.15
	b. With ribs of horn, bone, or paste, or of metal other than gold or silver, N. W.	.....do	2.00	.60
	c. With ribs of tortoise shell, ivory, or mother-of pearl, those covered with kid or silk, and those of feathers, N. W.	.....do	3.00	.80
302	Ornaments of all kinds, except those of gold or silver, N. W.	.....do	3.00	.75
303	Amber, jet, tortoise shell, ivory, and mother-of-pearl:			
	a. In the rough, N. W	.....do	1.20	1.00
	b. Manufactured, N. W	.....do	3.75	1.80
304	Horn, whalebone, celluloid, meerschaum, and bone, and imitations of these articles and of those in the preceding item:			
	a. In the rough, N. W	.....do	.60	.60
	b. Manufactured, N. W	.....do	1.40	1.20

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment.	Discriminating duty.	Revenue duty.
	CLASS XIII.—MISCELLANEOUS—continued.		*Pesos.*	*Pesos.*
305	Canes and handles for umbrellas and sunshades..... Sword canes shall pay, upon the blade, the duties assessed upon the blades of foils, besides paying those to which they are subjected as canes without a sword.	Hundred	6.00	4.00
306	Buttons of all kinds, except those of gold or silver, N. W.....	Kg.....	.50	.20
307	Human hair, worked in any form or article, N. W.....	.....do	.....	5.00
308	Cartridges, with or without projectile or ball, for firearms allowed, and the primers or shells for the same, T. (Pro. VI, rule 5).	100 kg.....	30.00	30.00
309	Sanded oilcloths for wagons and tarred or pitched felt and tow, G. W.	.....do	.28	.28
310	Oilcloths and india rubbers:			
	a. For floors or for packing, T. (Pro. VI, rule 5).....	.....do	8.25	3.00
	b. Other kinds, T. (Pro. VI, rule 5)..... India-rubber portfolios shall pay an additional duty of 40 per cent.	Kg.....	.14	.06
311	Cases:			
	a. Of fine wood or of skin, those lined with silk, and others of similar kinds, N. W.	.....do	1.50	.75
	b. Of common wood, pasteboard, osier, and others of similar kinds, N. W.	.....do	.60	.20
312	Artificial flowers of cloth and the separate pieces, of any material, for making such flowers, N. W.	.....do	2.50	1.00
313	Matches of wax, wood, or pasteboard, including the weight of the inner packing, N. W.	.....do	.60	.20
314	Gum elastic or gutta-percha, worked into any shape or into articles not specified in the tariff, T. (Pro. VI, rule 5).	.....do	.25	.05
315	Games and toys, except those of tortoise shell, ivory, mother-of-pearl, gold, or silver, T. (Pro. VI, rule 5).	.....do	.30	.10
316	Umbrellas and sunshades:			
	a. Covered with silk fabrics.....	Each	.50	.10
	b. Covered with other fabrics..... Umbrellas and sunshades shall always pay duty on the stuff with which they are covered, and not on that with which they may be lined.	.....do	.15	.05
317	Oil paintings (see Provision III, No. 13).....	.....	.....	20 p. c. ad valorem
318	Hats of straw, palm leaf (guano), Curaçao straw, and the like.	Dozen ...	.32	.10
319	Hats of yarey, Italian straw (Leghorn), indian straw, rice straw, or feather grass, and their imitations:			
	a. Finished (armados) or unfinished, but without ribbons, bindings, or lining or ornaments:	.....do	1.60	1.40
	b. Finished (concluidos), or with any of the above accessories.	.....do	2.15	.80
320	Panama hats (jipijapa):			
	a. Up to 4 straws, inclusive.....	.....do	.....	4.50
	b. From more than 4 straws to 6, inclusive.....	.....do	.....	8.00
	c. Of more than 6 straws.....	.....do	.....	30.00
321	Hats of woolen felt:			
	a. Finished (armados) or unfinished, but without ribbons, bands, or lining, and the so-called "camisas" or cases for making hats.	.....do	1.20	.40
	b. Finished hats, with ribbons, bands, and lining, or with any of these accessories.	.....do	2.40	.80

Tariff of imports—Continued.

No. of item.	Articles.	Unit of assessment	Discriminating duty	Revenue duty.
	CLASS XIII.—MISCELLANEOUS—continued.			
322	Hats of hair felt, carded or uncarded (with or without a nap), and silk, corduroy (pana), cloth, cashmere, sateen, and plush hats:		*Pesos.*	*Pesos*
	a. Finished (armados) or unfinished (desarmados), but without ribbons, binding, or lining, and the so-called "camisas" or cases (fundas), for making hats.	Dozen...	3.00	0.75
	b. Finished hats, with ribbons, binding, and lining, or with any of these accessories.	....do.....	4.50	1.00
323	Hats for women and children, without regard to their ornaments or accessories.	Each	1.25	.40
324	Caps of all kinds	Dozen...	1.40	.40
325	Waterproof fabrics and those of india rubber:			
	a. On cotton cloth, T. (Pro. VI, rule 5)	Kg.....	.75	.25
	b. On woolen or silk cloth, T. (Pro. VI, rule 5)	....do.....	1.50	.50
	Under this item shall be assessed all articles coated with india rubber (goma) on one or both sides, and, also, those lined with india rubber (goma) on the inside.			
326	Tobacco:			
	a. Plug tobacco, G. W	100 kg.....	.....	10.50
	b. Snuff, G. W	Kg.....	.....	1.20

Export tariff.

No. of item.	Articles.	Unit of assessment.	Duty.
			Pesos.
1	Woods	Appraisement..	6 per cent.
2	Manufactured (elaborado) tobacco:		
	a. Boxes of cigarettes	Thousand	0.90
	b. Picadura	100 kg.....	3.75
	c. Twist	Thousand	1.35
3	Leaf tobacco:		
	a. Raised in the province of Santiago de Cuba and exported through the custom-houses of Santiago, Gibara, or Manzanillo.	100 kg.....	2.205
	b. Other leaf tobacco	.....do.....	20.00
	Leaf tobacco fit for capa shall pay the duty on the leaf and an additional duty of 100 per cent.		
	When capa and leaf tobacco are exported together in the same package or lot of any kind, the whole quantity shall pay the duties on capa if the proportion of capa exceeds 10 per cent of the whole weight.		

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AGRICULTURE AND INDUSTRIES OF THESSALY.

AGRICULTURAL PRODUCTS.

The Turkish Government seems to be very reluctant to evacuate the province of Thessaly, and the long period over which the negotiations of the great powers are being drawn out serves only to give Turkey the opportunity of establishing a firmer foothold. The entire system of the Ottoman Government has been put into effect, fortifications strengthened, and many fresh troops brought into the country since the signing of the truce. Even should peace be signed to-morrow and the refugees be allowed to return to their abandoned homes, several years would be required to repair the damage done and to reestablish life and industry on their former basis. The Turkish troops have profited by the harvest season to reap and appropriate the grain, which last year amounted to 4,440,000 bushels of wheat, 951,430 bushels of indian corn, and 1,287,700 bushels of barley. The evil effect of this loss is already noticeable in the increased importation of foreign grain and the rise in the price of bread between 1 and 2 cents per loaf.

The sheep and cattle which were not driven away by the fleeing inhabitants have gone to feed the Turkish army. This is also a serious matter for Greece, as the principal meat supply has hitherto been derived from the captured province. Last year, this product of Thessaly numbered 2,000,000 sheep and 30,000 cattle. This latter industry is only in its infancy in Thessaly, and with proper attention should grow to large proportions, the well-watered hillsides and fertile plains being especially favorable to it.

In ancient times, the horses of Thessaly were celebrated throughout the civilized world, and should be so to-day. Owing, however, to the improvidence of the Greek people, all their good horses are imported, and during the late war, commissioners were sent to Hungary to buy horses for the cavalry and artillery, for which they paid 800 francs ($154.40) and upwards a head. The first great rout of the Greek troops at Larissa was due to the superiority of the Turkish cavalry.

Although the development of Thessaly was rapidly progressing, large tracts of it had not as yet been brought under cultivation, owing to scarcity of laborers and lack of modern agricultural implements. Of late, however, many laborers have flocked thither during harvest time from Turkey and Asia Minor and from the other provinces of Greece. For the last few years, Thessaly has been supplying one-third of the whole wheat supply of Greece.

Besides grain, the chief agricultural products of Thessaly are fresh fruits of all kinds, vegetables, nuts, sesame seed and oil, tobacco, lumber, olives and olive oil, wine, and beet root for sugar.

FORESTS.

Thessaly abounds in forests, consisting chiefly of oak, beech, walnut, chestnut, platane, pine, etc. The exploitation of these forests is of recent date, being rendered difficult by the wretched condition of roads and the nonexistence of forestry laws. Under Minister Tricoupi, the Thessalian Railroad was built, a system of roads constructed connecting the chief agricultural centers, and a forestry commission established. Young men were sent to Germany and Austria for special training in forestry, and on their return were employed in this branch of the public service. The effect of these wise measures was immediately apparent, the influence of good roads on the revival of agriculture being particular noticeable. There are at present no sawmills in Thessaly, but one had been projected before the breaking out of hostilities. The forests of Thessaly were owned by the Government, by private persons, and by communes. Those owned by the Government—the greater portion—were let at the rate of 7½ drachmas (nearly $1) per cubic meter (35.3 cubic feet) for the cutting of timber and the making of charcoal. The imported timber of Greece comes mostly from Austria and Sweden.

INDUSTRIES.

At Trikkala, there is one roller-mill plant of Hungarian make, which cost over $50,000; at Larissa, a stone and roller steam mill of Swiss make; at Belestilo, a stone and roller mill of Hungarian make, turbine wheel and steam, that cost $40,000; in Volo, there are six stone mills, mostly of Swiss or English manufacture, besides a great number of stone mills driven by water in various parts of the province.

At Lazarina, is the sugar factory of Christakis Zographos. This factory, the first in Greece, was founded in 1893 and cost over $600,000. It is managed by French specialists and all the machinery is of French manufacture. It ran at a loss until last year, when it produced 132,000 pounds of sugar and paid expenses. Sugar retails in Greece at from 1.80 to 2.20 drachmas per oke (7 to 8.7 cents per pound).

At Volo, there are four tanneries equipped with French and English machinery, several small cotton-spinning mills worked by hand which manufacture yarn and the coarse stuffs worn by the peasants, and a wood-working factory for the manufacture of furniture supplied with German and English machinery.

At Volo and Larissa, there are several manufactories where rude plows and other agricultural implements are made.

AREA AND POPULATION.

The area of Thessaly is 13,395.48 square miles. It is divided into two provinces, of which the population is as follows: Larissa, 181,542; Trikkala, 176,773; total, 358,315. The principal towns of Thessaly and their population are: Trikkala, 21,149; Volo, 16,232; Larissa, 15,373; Carditsa, 9,446; Tirnavos, 5,528; Almyros, 4,883.

There are at present scattered throughout Greece over 100,000 Thessalian refugees, most of them in a condition of destitution.

GEORGE HORTON,
Consul.

ATHENS, *August 16, 1897.*

A NEW ILLUMINANT.

I have the honor to report an important discovery which, it has been claimed, will in time do away with the present system of illuminating public places, etc., with the electric arc light. The details, briefly, are as follows:

Mr. Ernest Salzenberg, director of the gas works of the city of Crefeld, has invented an improvement in incandescent gas-burners, which relates to the production of incandescent gaslight, based upon the discovery that, when the pressure of the gas is considerably increased upon the incandescence body, the said body emits a golden-yellow light, very agreeable to the eye, displaying objects in their natural colors.

The gas is supplied to the burner at a pressure of about 3½ atmospheres, the burner, to withstand this high pressure, being of special construction. A single incandescent jet of the ordinary size can emit a light of much more than 1,000 candlepower. The light is of such intensity that a person is enabled to read the finest print at a distance of 100 to 150 feet.

The inventor claims that the cost of his incandescent light of 1,500 candlepower is only 4½ cents per hour, while that of the ordinary electric light of 400 candlepower is (in Germany) 14 cents per hour.

In the apparatus constructed by Salzenberg, a hydraulic pressure of 3.5 atmospheres, and even more, may be forced through the improved Auer burner.

The invention is, however, only applicable where waterworks exist.

Mr. Salzenberg has already applied for letters patent in the United States.

P. V. DEUSTER,
Consul.

CREFELD, *October 29, 1897.*

RAILROAD PROJECTS IN NICARAGUA.

A remarkable feature in the topography of Nicaragua is the interruption of the great ridge of mountains that runs through the American continent. In this, the backbone of the western hemisphere, we find in Nicaragua a deep depression in the shape of two magnificent lakes of 2,600 and 500 square miles, respectively—a most remarkable caving in that reaches as far as the Atlantic coast in the form of the great valley of the San Juan River, a stream of about 150 miles in length, and extends to the Pacific as a vast plain, the main level of which does not exceed 100 feet above the level of the sea.

That a country with such features should be regarded as the dividing point between North and South America for many centuries is quite comprehensible. Circumstances, however, prevented the completion of this separation and the connection of the two oceans through the work of man. Although the hope of seeing this problem solved by the construction of the Nicaragua Canal is more active than ever, a glance at the map brings conviction that an outlet for the country to the Atlantic coast, be it by river navigation or railway, would be an easy matter of realization and a paying investment.

With the River San Juan, which nature seems to have destined to form that outlet, time has reversed the intention. Once a stream available to navigable craft of such considerable size as were used by the pirates who went up as far as Granada to plunder the inhabitants, the river has become more and more difficult of navigation. This change is due to a gradual rise of the eastern coast of Nicaragua and a succession of dry seasons for the last four years, which have kept the level so low that the navigation carried on even by flatboats has been several times endangered, and is now kept up with great difficulty. Besides this, the harbor of Greytown is closing up more and more and is no longer accessible for vessels of deep draft. The bulk of trade, therefore, takes its course by the way of the Pacific ports—Corinto and San Juan del Sur, fourteen days from New York. A fairly good connection between Corinto and the principal inland towns located on the western slope is procured through two lines of Government railway, 58 and 32 miles long, respectively. The gap between these lines is filled by navigation on Lake Managua, carried on by three Government steamers of 150 tons capacity each. The trip from Corinto, the western, to Granada, the eastern, terminus of the lines takes twelve hours. The western division, from Corinto to Momotombo, was finished in December, 1883, and the eastern section,

from the capital, Managua, to the wharf of Granada, was opened to traffic in July, 1886. They have cost the Government $2,700,000 (silver), rolling stock, stations, etc., included; and the steamers, which belonged to a private company up to 1890, were purchased for $270,000 (silver). The gross earnings of the whole line (steamers included) are about $400,000 (silver), and the running expenses $310,000 a year. The profits have dwindled down at least 25 per cent since 1893, owing to bad management and increase of expenses for repairs. The railway is mortgaged to the English bondholders of the national debt for the amount of £285,000 ($1,386,952.50).

Since the completion of the road, railroad building ceased in Nicaragua until last year, when the Government, through private contractors, undertook the construction of a road from the town of Masaya to connect several villages situated in the midst of a rich coffee district. There are about 9 miles finished out of a total of 29 miles, and in a year the road will be opened to traffic.

Several other lines have been projected, more or less exact surveys made, and contracts given to private persons, natives as well as English and American, but none of the promoters have succeeded in raising the funds necessary for construction. There is, for instance, the contract for building the very important road from Momotombo, on Lake Managua, to the coffee districts of Matagalpa and Jinotega, with an eastern terminus at a point on the Rio Grande where it commences to be navigable for ocean steamers. This line would be about 250 miles long and could not be built for less than $10,000,000 (gold). Many mountain ranges of 3,000 feet in height would have to be overcome by heavy grades, which would not only make construction very costly but would also make the operating difficult.

A route much more feasible to solve the problem of procuring an outlet to the Atlantic coast is the projected railway from the port of San Ubaldo, on the eastern shore of Lake Nicaragua, to the city of Rama, on the river of the same name.

The first concession was given to a Nicaraguan, Pedro Ramirez, in 1887, who spent considerable money in a survey and efforts to syndicate the scheme. The latter was never attained, but a fairly exact survey and estimates were gotten up. According to these, the road from San Ubaldo to Rama is 102 miles long and would be 220 miles in case an extension running around the northern part of Lake Nicaragua to connect with the national road at a point called Sabana Grande is determined upon. The summit is 900 feet above sea level.

A port on the Atlantic, to be reached from Rama in a few hours by navigation on the deep River Escondido, is Bluefields, a thriving

town of 2,000 inhabitants. Here, some dredging has to be done to open a channel through the bar in front of the bay. This concession was forfeited, as no money could be raised for construction. Last year, a contract was under consideration to have the work done by an American construction company represented by Mr. Rudolf Wieser, agent of the Maritime Canal Company of Nicaragua, who offered to do the work for $6,000,000 (silver). The Government, however, considered this too high and withdrew its proposition.

On November 12, 1896, another concession was granted to Messrs. Henry A. Barling and Frank A. Davis, two young Americans, whose backers are unknown. They bound themselves to commence surveys ten months after approval of the concession by Congress and deposit $50,000 in gold in the Nicaragua Treasury four months before starting the surveying work. The franchise is good for ninety-nine years, the Government reserving for itself the right to buy the line thirty years after completion. It can not be transferred to any foreign government. Besides a grant of land in lots of 3 square miles, alternating with Government lots of the same size all along the route, the concessionaries have a right to denounce 100,000 manzanas (175,000 acres) more, paying for this land the usual Government price—$2.50 (silver) per manzana (1¾ acres). Another clause gives the promoters a right to preemption on the national roads and steamers. They are allowed six months for surveys and three years for construction.

The President has declared to a party of respectability that the concession has been forfeited, as the promoters failed to give evidence of the company having been organized and the capital subscribed.

The many deceptions to which the people of Nicaragua have been subjected from concession hunters having no capital to show of their own or of other people have made the Government highly suspicious, and the days of the speculators, who used to hang around the lobbies of the President and the secretaries awaiting an opportunity to approach and "strike" them for a concession, are gone. If, however, a capitalist of well-known standing and first-class connections appears and shows that he has the means and good will to invest money in the transportation business, he is sure to find the Government ready to listen to his proposals and foster his plans, for the country is in such a condition at present that the Executive must do something to replenish the depleted treasury and stimulate commerce and trade. The best means to achieve this end, it is thought, is to sell concessions to men who are able and willing to develop the boundless resources of Nicaragua. I must repeat again, there is no better business in Nicaragua at hand just now than the

building of a road to the Atlantic, and of all projected roads the one from San Ubaldo to Rama City offers the most promising results.

I do not mean to say by this that other routes that have not been under consideration may not be found even more advantageous after a close examination—for instance, the one from San Miguelito, on Lake Nicaragua, to Monkey Point, a splendid place to establish a deep-water harbor—but the Rama road has the advantage of having been thoroughly surveyed, so that no time need be lost in preliminary works. The necessity of commencing soon is evident if one considers that such an enterprise could derive incalculable benefit from the operations of the canal company by carrying material to the lake, the River San Juan, and the western division, which otherwise would have to be brought in from the Pacific, still more largely swelling the pockets of the Pacific Mail Company.

PAUL WIESIKE,
Consul.

MANAGUA, *July 31, 1897.*

SUPPLEMENTARY REPORT.

Referring to the foregoing report, in which I pointed out the necessity of building a railroad from the interior of Nicaragua to the Atlantic coast, I beg to submit the inclosed translations of letters received by me from President Zelaya and Gen. Miguel Espinoza, president of the Nicaraguan Congress, now in session, and to state that Señor Don Santiago López, the representative in Congress of the Atlantic coast district, has been found ready to present a bill in Congress based upon the points given in my reports. I trust that I shall succeed in having such liberal privileges granted to American citizens as will enable them to build that road and bring the United States in closer connection with this country.

PAUL WIESIKE,
Consul.

MANAGUA, *August 13, 1897.*

PRESIDENT ZELAYA TO CONSUL WIESIKE.

MANAGUA, *August 9, 1897.*

Mr. PAUL WIESIKE,
Consul af the United States.

MY ESTEEMED SIR AND FRIEND: With deserving interest have read the important explanations which you deigned to communicate to me respecting the construction of a railroad to the Atlantic by an American company.

I am really interested in this project, and nothing would be more satisfactory to me if it should be carried into effect by the progressive citizens of the United States, for whom I have so much sympathy and to whom we, the Nicaraguans, are linked by close ties of common interests of the continent. This I have manifested on various occasions to the honorable minister of the United States and have demon-

strated it by giving a concession to Messrs. Davis and Barling, both American citizens.

Believe me, I am ready to consider attentively your proposals. Should there appear a serious party or American company, either personally or as legal representatives, the most favorable concessions possible would be granted for the construction of the projected line or lines in Nicaragua.

I avail myself of this occasion to repeat the expressions of my most distinguished appreciation and subscribe myself,

Your attentive very true servant, J. S. ZELAYA.

GENERAL ESPINOZA TO CONSUL WIESIKE.

Señor Don PAUL WIESIKE.

Received your considerations referring to the matter of the railroad to the Atlantic by way of Rama, which you had the amiability to remit me.

Having taken note of them, I beg to state to you that I have understood that your illustrious opinion is in accord with that of the members of Congress, who desire vividly that this enterprise, which will extricate the country from grave difficulties, be carried out as quickly as possible.

MIGUEL ESPINOZA.

THE SALT INDUSTRY OF ST. CHRISTOPHER.

St. Christopher, though essentially a sugar-producing island, possesses also means for the manufacture of salt. The two articles require, however, weather as different as day and night for their production. During the last three years rain has fallen in copious showers, which, while tending to produce an abundant harvest of sugar cane, has completely put a stop to the salt industry.

The southeastern extremity of St. Christopher, in striking contrast with the other parts of the island, is extremely dry and barren, and here is situated the plantation known as the "Salt Pond Estate," covering an area of about 2,400 acres. Formerly, sugar cane was cultivated to a considerable extent, as the abandoned works mutely testify, but this industry has long since ceased to exist. Salt is now the only article that makes the property of value, and it is obtained from a pond at least 300 acres in extent. In form, it is oval, and the water around the shores averages from 3 to 5 inches in depth, while in the center it is about 2 feet. The bottom is covered by soft, black mud, upon which the crystallization takes place. At a distance of 300 yards there is a smaller pond, which is used as a reservoir for the preparation of brine, and the western shore of which is contiguous to the sea.

The process is as follows: From the sea to the reservoir there is a canal, with a flood gate through which sea water is let in until a sufficient quantity is obtained. The flood gate is then closed and evaporation by solar heat takes place. From a density of about 3°,

the ordinary saline strength of sea water, the evaporation continues until 16° or 18° is reached, which is tested by means of a hydrometer. The brine thus formed is transferred through another canal from the reservoir to the salt pond, where the evaporation continues until the density is 25°. At this point the salt can no longer be held in solution, and its deposit on the mud below commences. Should the surface of the water be unruffled by the wind, the process can be seen to perfection. The salt, looking like grease floating on the water, gradually breaks away and trickles to the bottom, where it looks like thin, watery milk. This deposit goes on from day to day until crystals are perceptible, and these increase in size until considered mature, the sides of the top squares of the grains averaging from three-quarters of an inch to 2 inches in length.

The harvesting now begins. The laborers, provided with wicker baskets made in the shape of a basin and holding half a bushel, enter the pond, break the layer or crust of salt (varying from three-quarters of an inch to 2 inches in thickness), and by means of their hands lift large flakes, which are thrown into the baskets. When full, the baskets are moved in the water in such a manner as to leave the salt thoroughly cleansed from mud or any particle of dirt, and to cause the flakes to break into grains. This accomplished, the salt is thrown into large flat-bottomed punts holding each about 30 barrels. When the punts are laden, they are forced by means of poles through the shallow water and soft mud until they are as near the delivery point as they can be got. The salt is then taken in trays and tubs, on the laborers' heads, to the pile where it is measured in barrels, the piles containing from 30,000 to 50,000 barrels.

The laborers are paid from 6 to 8 cents per barrel for the salt delivered on the pile, and thus an expert can earn from 75 cents to $1 per day.

The salt is of superior quality and is very heavy, averaging 87 pounds to the bushel. It is well adapted in its natural state, *i. e.*, while the grains are coarse, to the packing of beef and pork, and when crushed or ground, to the preservation of codfish, etc.

Formerly, shipments were made to the United States, but during the last years, owing to unfavorable weather, the manufacture of the article has been impossible.

The property is owned by a baronet in England, who, it is said, from a combination of favorable circumstances, once earned $20,000 during one year.

The pond is capable of producing, in favorable weather, about 300,000 bushels.

LEWIS H. PERCIVAL,
Vice-Commercial Agent.

ST. CHRISTOPHER, *July 10, 1897.*

FOREIGN BUTTER IN COLOMBIA.*

The best butter is imported from Denmark, but butter is also imported from Italy, Ireland, England (Morton's), Germany, and the United States.

Fine butter is always put up in 1 and 2 pound tins. American butter comes in 5 pound tins, but it is of poor quality and is only used for cooking.

All butter comes in boxes of 100 to 120 pounds each.

In packing Danish butter, sawdust is never used. I inclose a sample† of what is usually used, but rye, rice, and barley husks are also used. The United States uses sawdust for packing. This should not be done, as there is more or less leakage, the cans become dirty, and the butter has to be sold at a discount.

The duty on butter imported into Colombia (under class 6 of the tariff) is as follows, in centavos, per kilogram: In August, 27⅛; September, 28; October, 28⅛; November, 29; December, 29⅛; in January, 1898, and thereafter, 30. Exchange is now calculated at 150 per cent premium for gold.

There are no requirements, such as a certificate of legitimacy of contents.

The names of leading importers of butter in Barranquilla are: Gieseken, Ringe & Co., A. H. Berg, Pardy & Co., Flohr, Price & Co., Wehdeking, Focke & Co., B. T. Senior & Co., O. Berne & Co., Mayans, Medina & Co., Correa & Helm, J. Castellano & Co., J. Brusse, Pacini Hermanos, S. Marquez, M. J. Martinez, S. Julio, Z. de la Rosa, S. Nuñez & Co., Tomas Magri, Angel Giacometto, Demetrio Davila, and Rafael A. Niebles. All correspondence with these firms should be in Spanish.

The American butter shipped to Barranquilla is of very poor quality. It becomes liquid at once, and rancid when exposed to the air. I saw a case of American butter opened last week and almost every tin was leaking; a tinsmith had to be engaged to resolder the tins. The tin used was light and of the poorest quality.

A merchant said to me: "Tell your people to send us the best butter; we can pay good prices, but we can not sell poor butter."

I would suggest that samples of butter be sent to the different merchants to enable them to compare it with the Danish.

P. F. Esbensen, of Copenhagen, Denmark, charges 17d. (34½ cents) per pound for butter put up in tins of 1 pound. This butter sells here for $1.50 currency (60 cents in gold).

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* This report was made at the request of a New York house, to which a copy was mailed

† Sample sent to the house making the inquiry.

A quantity of German butter is shipped into the interior in cases weighing 125 pounds.

It must be borne in mind that duty is charged on the gross weight of the case or package. While the tin used should be strong and of good weight, the case should be light but strong, for if the butter is intended for shipment into the interior it has to be transported on mule back, journeys of from one to ten days.

JOHN BIDLAKE,

BARRANQUILLA, *July 22, 1897.* *Consul.*

GOVERNMENT TELEGRAPHS IN INDIA.*

This report is based on the present exchange value of the rupee on London, which now is about 1s. 4d., or nearly 32 cents, and on the Administration Report of the Indian Telegraph Department for 1895–96, the report for last year not having been published.

The total line miles in operation March 31, 1896, was 46,395, and of wire, 149,926. The net capital account was 58,768,582 rupees ($18,506,080).

The net receipts for the year were 8,974,949 rupees ($2,872,000), and the expenditures, including extension of lines, 5,783,726 rupees ($1,850,088), leaving a net revenue of 3,191,223 rupees ($1,021,120), notwithstanding the low tariff rate for telegrams.

The service is excellent, and the people, as a rule, are satisfied with it. The telegraph lines in India have always been owned and managed by the Government, and the people have no desire for a change. There are three classes—"urgent," "ordinary," and "deferred," the first taking precedence, and is 4 annas (8 cents) a word; the "ordinary," 2 annas (4 cents); and the "deferred," 1 anna (2 cents), to any part of India, charging for not less than eight words, exclusive of the address, which is free. The "deferred" telegrams are very generally used, and it is probable that a change will soon be made, using only the "urgent" and the "deferred," which give cheap rates, and, at the same time, a net revenue of more than 5 per cent on capital invested is paid to the Government.

R. F. PATTERSON,

CALCUTTA, *September 21, 1897.* *Consul-General.*

* The inquiry which produced this report was made by a gentleman in Madison, Wis., to whom an advance copy has been mailed.

NOTES.

Hogs Slaughtered in the Grand Duchy of Hesse in 1896.—Consul Schumann writes from Mayence under date of October 26, 1897:

I have to report that I am in receipt of an official communication from the Ministry of State of the Grand Duchy of Hesse, stating that, during the year 1896, 246,685 hogs were slaughtered for market in the Grand Duchy of Hesse.

Ventilators and Exhausters Free of Duty in the Netherlands.—Minister Newel reports from The Hague, under date of October 22, 1897, that, by ministerial order of October 11, 1897, it has been ordered that ventilators, exhausters, and bellows which are worked by a steam, gas, petroleum, or electric motor only, and are used in factories and on ships, and only in exceptional cases elsewhere, may henceforth, and for that reason, be admitted free of import duty. Ventilators for ordinary ventilating purposes and not worked by the aforementioned motive power shall remain subject to the existing duty.

Tariff Classification in Venezuela.—Under dates of October 8 and 10, Consul Plumacher, of Maracaibo, transmits copies of treasury decrees giving tariff classification to the following foreign products imported into Venezuela, and which were theretofore unclassified: Cotton cloth mixed with artificial silk, and ramie cloth, or weavings of cotton mixed with ramie, seventh class (5 bolivars per kilogram=96½ cents per 2.2046 pounds); mineral used in the manufacture of acetylene, class 1 (free); tobacco and ready-made cigarettes, 4 bolivars per kilogram (77.2 cents per 2.2046 pounds); cotton plushed cloth, used for toweling and counterpanes, class 5 (24 cents per 2.2046 pounds).

Electric Street Railways in St. Etienne.—Consul H. S. Brunot, of St. Etienne, sends the following, dated October 21, 1897:

I beg leave to inform the Department that several new lines of electric street railways have just been voted by the municipal council of this city. These enterprises may afford good opportunities to our electric-plant builders to propose their machinery to the con-

tractors of these lines. The names of the probable contractors are M. Cuffinhal, electric engineer, St. Etienne, and M. Buffaud, Rue Hotel de Ville, Lyons. Besides these urban lines, the surveys of two cross-country steam railways, each about 60 miles in length, have been completed and work is about to be commenced. Further, plans of a cog railway to the summit of Mount Pilal, a high mountain in this department, are being discussed. The promoter of this latter is M. Doppler, Rue Grange de l'Oeuvre, St. Etienne.

Ottawa and New York Railway.—The United States commercial agent at Morrisburgh sends the following printed dispatch relative to the work on this railway:

CORNWALL, Ont., *November 1.*

The builders of the Ottawa and New York Railway are breaking all records in the matter of construction. The grading of their line is almost completed, and it is expected that trains will be run through to Ottawa within thirty days. The rails have been laid to within a few miles of Cornwall and are being rushed toward both ends of the line. The bridge contractors are concentrating their efforts on the bridge across the south channel, where the land piers are about completed, and one of the two river piers will be finished in ten days. The crib for the other pier has been anchored and the work of filling it with concrete is progressing rapidly.

Boat loads of structural iron are arriving every day and are being unloaded at a dock on the south side of Cornwall Island.

The bridge across the St. Regis River at Helena, N. Y., will be completed by the 15th instant. This bridge is 250 feet long, with a pier in the center of the river. The foundations are of concrete and the abutments of St. Regis limestone.

New Railroads in Manitoba.—In his annual report, to be printed in Commercial Relations, Consul Duffie, Winnipeg, Manitoba, under date of October 12, 1897, says:

A new railroad, called the Crows' Nest Pass Railroad, is now under construction from Lethbridge, in the province of Alberta, to Vancouver or vicinity, in British Columbia. When completed, it will run near the international boundary line and through the Kootenay country. A new railroad is projected from Edmonton to the Athabasca River, with a view of opening up a new route to the Yukon and Klondyke country.

Goat and Kid Skins in Catania.—Consul Brühl, of Catania, under date of October 8, 1897, reports as follows:

As the season for export of these products is near at hand, I called this morning upon the firm of Pietro Marano, the leading exporting house in this line, and also importers of hides. I learned that this year's output of goat and kid skins is believed to be good. Catania

will handle from about 300,000 to 350,000 skins. They are packed in bales of 1,060 skins (each bale counting or selling for 1,000 only), and the prices at which they are expected to be sold will be: For kidskins, 1,200 to 1,300 paper lire* per 1,000 (1,060), and for goatskins, 1,400 to 1,500 paper lire per 1,000 (1,060). I understand the prices to be free aboard ship at Catania. Terms, generally cash; but to good houses with established credit, sixty days acceptance.

Sugar-Beet Culture in Europe.—Consul Germain, of Zurich, under date of September 30, 1897, reports as follows:

As shown by the table below, the area planted to sugar beets in the different European countries in 1897 is, on the average, slightly behind that of 1896.

Countries.	1897.	1896.	Increase or decrease.
	*Hectares.**	*Hectares.**	*Per cent.*
Germany	436,993	425,004	+ 2.8
Austria-Hungary	302,950	347,400	−12.8
France	231,110	249,050	− 7.3
Russia	399,500	357,150	+11.9
Belgium	52,939	71,275	−25.7
Holland	32,344	44,385	−27.1
Sweden	23,665	28,360	−16.5
Denmark	12,890	12,330	+ 4.5
Total	1,492,390	1,534,962	− 2.7

*1 hectare=2.471 acres.

Destruction of Cocoanut Trees in Nicaragua.—Under date of September 16, 1897, Consular Agent Clancy, of Bluefields, reports:

Mr. J. A. Petersen, of this place, tells me that, since July, 1896, up to the present time, over one-third of the cocoanut trees on Big Corn Island have been destroyed and that unless some preventive measure is adopted within one year from date there will not be a cocoanut growing on the island. He estimates the loss to the present time at 50,000 trees, leaving 100,000 for the bugs to exterminate. Little Corn Island, 7 miles from the big island, is being devastated in the same way. There are 6,000 good trees at present on this island. The five hundred inhabitants of Corn Island depend on the cocoanuts for subsistence.

The bug gets into the young tree and kills it at once, and the old trees are ruined from the top in the following manner: The bug, in

*The paper lira is a depreciated currency, and its value is 18¼ to 18½ cents in United States gold. There has been very little fluctuation during the last year.

some way, gets to the tops of the old trees and eats or bores a hole into them; the trees then sour, and the locust comes along and finishes the work. The trees have the appearance of having been destroyed by fire. There has been no effort made as yet to remedy the evil.

A similar disease or plague killed all the cocoanut trees on Grand Cayman and Old Providence some years ago. I am informed that an investigation was made by some parties from the United States on the island of Grand Cayman, but was fruitless in results.

Mr. Petersen informs me that the insect that does the damage is a fair-sized bug, with good boring qualities.

Bank Bills in Nicaragua.—Consul O'Hara, of San Juan del Norte, reports, September 20, 1897:

I have the honor to report that orders have been issued by the Government that hereafter the bills and notes circulated by the London Bank of Central America, Limited (a banking company engaged in business in Managua), shall not be received in public offices on this coast at their face value, but shall be subject to a discount of 10 per cent. I presume that the orders relate to all public offices in the country, but I have seen only those telegraphed to this coast. Outside of Government offices the bills will probably continue to pass at par value.

How to Further Our Trade in Mexico.—Consul-General Donnelly, of Nuevo Laredo, October 6, 1897, makes the following suggestion:

Wherever there is a United States consulate, there are Americans who talk Spanish and are familiar with the business wants and methods of the community. These are known to the consul, and, through him, can be put in communication with our merchants and manufacturers and made available for the work of seeking trade here with the vigor and directness it is sought for at home. This suggestion will doubtless apply to all Spanish America.

American Locomotives in China.—Under date of September 11, 1897, Consul Read, of Tientsin, transmits the following:

I have the honor to report that the steamship *Liv* has arrived with the twelve Baldwin locomotives for the Tientsin-Lukouchiao (Peking) extension, and is discharging her cargo at the railway wharf at Tangku.

A representative of the firm of Messrs. Burnham, Williams & Co., Philadelphia, the makers of these locomotives, is now in Tientsin to superintend their erection.

Eight of the locomotives are very heavy and are of the "mogul" type, and the order for them was secured by Messrs. Burnham, Williams & Co. last September, this firm having tendered at prices far below those submitted by English firms. The other four are switch engines, and were ordered outright without a call for tenders.

It is a matter of great satisfaction that the new line is equipped with American locomotives. We can rest assured that Messrs. Burnham, Williams & Co. have laid down locomotives that will be, in every respect, according to specifications, and that will more than meet the expectations of the railway officials.

I trust that we may, with regard to future extensions of the railway, hold the vantage ground that is now ours.

The next order for locomotives will be for the Lukouchiao-Paotingfu extension. This extension will be rapidly pushed as soon as the line to Peking has been double tracked.

Southampton Docks.—In his annual report, to be printed in Commercial Relations, Consul Kinkead, of Southampton, England, under date of September 27, 1897, says:

The Southampton docks, owned and managed by the London and Southwestern Railway Company, are situated within a perfectly sheltered harbor, and have the unusual natural advantage of double tides, with practically four hours of high water every tide, thus affording unrivaled accommodation for the largest steamers afloat. The Empress dock is the only dock in Great Britain where deep-water loading and discharging berths can be reached by the largest vessels at any time of day or night irrespective of the tide. Special trains from and to Waterloo Station (London) run directly to and from alongside the mail or passenger steamers on days of arrival and departure, the journey occupying about an hour and forty-five minutes. The new graving dock was completed and opened on the 3d of August, 1895, by the Prince of Wales, and named by him the Prince of Wales Dock. This is the largest single graving dock in the world, being 750 feet long by 87½ feet wide at sill and 91 feet at cope level, and it is possible to lengthen it to 1,000 feet should the size of vessels ever demand it in the future.

Great progress has been made with the new quay extensions in the rivers Itchen and Test. The upper portion of the new Itchen quay has for some time been extensively used for the arrivals and departures of the Union, Castle, and North German Lloyd liners,

etc. There is a minimum depth of 28 feet at low water or ordinary spring tides, and can be further increased to 30 feet. The south quay, 430 feet long, and the west (or Test) quay, 1,500 feet long, with a similar depth of water, are also being vigorously proceeded with, and it is expected will be completed some time during the year. A large coal-barge dock has been constructed on the Itchen, at the northern boundary of the dock estate, for the purpose of discharging bunker coal from the screw colliers, which bring it from South Wales or elsewhere, into lighters, which are afterwards taken alongside the steamer which is to be coaled.

American Manufactures in Southampton.—In his report on docks, above given, Consul Kinkead submits the following relative to American boots and shoes and furniture in Southampton:

Boots and shoes.—One or two firms in Southampton import these goods from the United States. They are much more comfortable to wear than the English made, but too light for general wear; the climate being of such a damp nature, they are somewhat unsuitable. A heavier class of boots and shoes, such as are used by working classes, if imported, would, I believe, meet with favor.

Furniture.—Very little American-made furniture is sold in Southampton, only one firm dealing in the same, and they only in a very limited way. A very large percentage of American goods landing in this port are put on railway trucks alongside the steamers and taken to London and there distributed to other cities and towns; also, goods shipped to the United States from this port come through from London and the Continent and are taken alongside the steamer in dock and placed on board.

The trade of Southampton is entirely in the hands of small retail dealers, there being no recognized wholesale merchants, such as are known in the United States; consequently most of the goods are taken from the dock direct to London, where the Southampton dealers purchase their supplies as required.

American Manufactures in Colombia.—In his annual report, to be printed in full in Commercial Relations, 1896–97, Consul Bidlake, of Barranquilla, Colombia, under date of October 1, 1897, says:

In the packing of goods for this market, American manufacturers do not compare favorably with European manufacturers. Merchants complain that they can not deal directly with the manufacturer, as he knows nothing about packing for this market, and that they are compelled to buy through commission firms who repack the mer-

chandise before forwarding. Duty is collected on the gross weight of the package or case, according to its class; therefore, there should be no unnecessary weight in the packing or covering.

As to boots and shoes, practically only those for women and children are imported and are of the French style, with Spanish heel, costing from 50 to 84 francs a dozen for women's and from 24 to 48 francs for children's. Men's are manufactured in the country, the uppers only being imported.

American tools of all kinds are preferred to European. They are better finished, lighter, and more convenient, but at the same time they are also more expensive. The machete may be taken as an example; the Collins machete is known throughout the whole of South America and is the standard. Germany makes an exact pattern of good material and offers to replace it should it break.

All furniture is imported—the cheap grades of common yellow chairs, cane seats, from the United States; round wood, black or brown, cane seats, from Bohemia, Austria. The Austrian goods are imported very largely; they are light, cool, and suitable for the climate. Furniture of this class comes knocked down, each piece well wrapped with straw and covered with burlap, in bales of 125 pounds, with one iron band lengthways on the bales.

The manager of the electric-light plant in this city informs me that the lowest price that he has been offered incandescent lamps in the United States is 18 cents, but that he has had offers from Italy of ordinary lamps of 3.1 watts candlepower at 55 centimes (10.6 cents). He also informs me that wire can be bought in Germany at from 10 to 15 per cent less than in the United States. In writing to me upon electrical apparatus in Colombia, the manager says:

> In the country that you represent, the major part of the manufacturers of this class of merchandise are sleeping upon their laurels, waiting for orders to come in through commission firms. They do not study the South American market, so as to become acquainted with the requirements of these countries.

The Beet-Root Crop of Europe.—Consul Bartleman, of Malaga, under date of October 22, transmits the following statistics relative to the beet-root crop of 1897–98, as given in El Fomento Industrial y Mercantil, of Madrid, in its issue of October 10:

Germany is expected to produce from 1,750,000 to 1,950,000 tons; Austria, from 750,000 to 830,000 tons; France, from 750,000 to 830,000 tons; Russia, from 750,000 to 830,000 tons; Belgium, from 215,000 to 250,000 tons; Holland, from 120,000 to 145,000 tons; and other countries, 185,000 tons, making a total of 4,500,000 tons.

In 1896–97, the crop was 4,915,749 tons. Comparing this with the coming crop, there will be a deficit of 416,000 tons. Taking the maximum quantity, the increase would be 164,000 tons; the medium, a deficit of 156,000 tons. The maximum, however, is more likely to be the case.

New Railroad in Austria-Hungary.—The Neue Freie Presse, Vienna, reports October 17, 1897:

With the opening of the new railroad between Cervignano and San Giorgio di Nogaro, a long-felt want has been filled. The new line of traffic, which has been for some time under construction, lessens the distance between the two most important ports on the Adriatic Sea, Trieste and Venice, by some 6.7 kilometers (4.2 miles) and offers inducements to development undreamed of by the inhabitants of the so-called Traumland (dreamland) traversed by the route. Only the comparatively short distance of 11 kilometers (6.8 miles) separates Cervignano from the Italian boundary, but it is only recently that the Austrian and Italian authorities have come to realize the importance of this connection. What time will intervene before the new line may be called one of the great veins of traffic between Trieste and Venice is still a matter of conjecture.

Maritime Works at Ostend.—Under date of October 28, 1897, Consul Morris, of Ghent, transmits the following particulars relative to the maritime works in that city:*

On December 18, 1897, at 10.30 a. m., at the provincial government house at Bruges, West Flanders, Belgium, the contract for the works involved in the projected enlargement and improvement of the harbor of Ostend, Belgium, will be awarded. The cost of these maritime works is estimated at $2,401,848.38. The bond required is $96,300. All bids must be written upon stamped paper, employing the forms required by Belgian law; they must be addressed to the governor of West Flanders, Bruges, and sent by registered letter postmarked not later than December 14, 1897. Plans and specifications may be consulted at the office of Mr. De Mey, engineer in chief and director of bridges and highroads, at Bruges; full information can also be obtained of the engineer (Vanderschemen), at Ostend, or from the Commercial Museum, 17 Rue des Augustins, Brussels.

How to Win Trade in Algiers.—Under date of Chemnitz, October 28, 1897, Consul Monaghan reports:

Some consul in Algiers has counseled his people to advertise, in French, by means of catalogues, directories, price lists, big posters, and articles in local papers if they want to win permanent markets in

* Given to the press immediately on its receipt at the Department of State.

Algiers. Add to this (and, by all odds, the most important factors) skillful, energetic, and capable agents, men familiar with French. These must be backed well financially, well paid and put up, so to speak, for making a good impression. Much depends upon the make-up and manner of living and traveling. Places must be visited twice a year, if possible. Agents must get a good idea of what is wanted and give goods as good as, if not better than, samples. Quality, finish, design, color, style, etc., must not be neglected. Calls should be made on our consuls for such information as only consuls can collect. Agencies, when possible, should be opened for the display and sale of goods, distribution of catalogues, and for collecting information. Once orders are obtained, avoid native or so-called commercial agents. Send goods direct. Make the customer as little trouble and expense as possible. Put everything possible—freights, duties, packing, and delivery—into each invoice. Payments are made on three, sometimes six, months' time. The best banks are the Credit Lyonais and Credit Foncier et Agricola d'Algerie. The foregoing is full of good things not only for the Algerine, but for South American, Australian, Eastern, and African trade. It epitomizes the very best commercial methods. Nothing has in it so much madness and nonsense as the sending of English catalogues, etc., to Russia and South America.

Textile Industries of France.—Commercial Agent Atwell, of Roubaix, November 2, transmits the following information concerning the condition of the textile industries of France in the month of October, 1897:

Wool more active; linen firm; spinning mills busy, while weaving is dull.

In the cotton trade, both spinning and weaving mills are reducing their production.

The silk production, particularly in the line of machine weaving, shows a marked increase over the month of September. In the Lyons district, however, the weaving of pure silk shows a falling off.

There is increased production in woolen underwear, passementeries, trimmings, ribbons, and hats and the dyehouses are doing good business.

Fifteen per cent of the workmen (usually employed as spinners) and machine weavers are idle. It is estimated that more weavers are employed this year at Amiens than during the corresponding period last season, more tapestry workers at Bayonne, and more hat makers at Chalon-sur-Saône. Hand looms, however, are doing less work than during the corresponding period last year and there is a

falling off in spinning and machine weaving at Roubaix and Lille, Rheims, St. Etienne, Flers (Orne), and Lillebonne (Seine Inferieur). This decline in activity also affects the Falaise houses, the dyers of Paris, Amiens, Regny (Loire), and Mitlan, the Havre sailmakers, the Amiens carpet factories, passementerie workers in the neighborhood of Paris, Versailles tailors, and the hatters of Bourges and Mans. In other places, the situation remains unchanged.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
E. Schneegans, Saigon	Sept. 4, 1897	Rice market	Department of Agriculture.
Do	Sept. 18, 1897	....do	Do.
M. J. Clancy, Bluefields	Oct. 1, 1897	Crop report	Do.
G. H. Jackson, Cognac	Oct. 11, 1897	Vintage prospect	Do.
John Fowler, Chefoo	July 21, 1897	Flour	Do.
G. F. Smithers, Chungking	Aug. 4, 1897	....do	Do.
T. R. Jernigan, Shanghai	Aug. 5, 1897	....do	Do.
Hunter Sharp, Osaka and Hiogo.	Aug. 27, 1897	....do	Do.
N. W. McIvor, Kanagawa	June 25, 1897	....do	Do.
C. C. Greene, Antofagasta	June 6, 1897	Chilean versus American flour.	Do.
S. H. Angell, Roubaix	July 13, 1897	Soya as food and fodder	Do.
J. H. Thieriot, Freiburg	July 16, 1897	Preservation of eggs	Do.
W. P. Atwell, Roubaix	Aug. 26, 1897	California dried fruits in France.	Do.

FOREIGN REPORTS AND PUBLICATIONS.

Commerce of France, Eight Months of 1897.—The Revue du Commerce Extérieur, Paris, October 2, 1897, says that the value of the imports into France for the first eight months of 1897 was 2,609,766,000 francs ($502,684,838), which is an increase of 73,596,000 francs ($14,403,028) over the same period of 1896. The exports amounted to 2,408,899,000 francs ($464,917,507), or 203,928,000 francs ($39,358,104) more than during the corresponding period of the preceding year.

Commerce of Italy, Seven Months of 1897.—In the Statistica di Importazione e di Esportazione, Rome, January to August, 1897, there are tables showing that the total value of the imports during the first seven months of 1897 was 769,000,476 lire ($148,417,091), an increase of 3,380,649 lire ($652,465) over the same period of 1896. The exports amounted to 709,086,782 lire ($136,853,748), or 52,248,157 lire ($10,083,894) more than in 1896.

Commerce of Greece, Seven Months of 1897.—The Government report on the foreign commerce of Greece, Athens, July, 1897, gives the imports for the first seven months of this year as 51,976,640 francs ($10,031,491), a decrease of 9,845,764 francs ($1,900,222) from the value of the imports during the corresponding period of 1896. The exports were 35,484,244 francs ($6,848,459), or 317,725 francs ($61,320) less than in seven months of 1896.

Demand for Machinery in Mexico.—The Revue du Commerce Extérieur, Paris, September 18, 1897, says:

The development of the mines in Mexico has occasioned a demand for all sorts of machinery and materials. There is also an opening for milling machines, and those employed in the manufacture of sugar, in distillation and brewing, in dyeing, spinning, and weaving. Fire engines, motors, machinery for constructing canals, railroads, and ports appear to meet with success. A central agency for these articles, with men having the necessary technical and commercial knowledge, would certainly, in time, be a remunerative enterprise. The Leipziger Tageblatt says that the traveling agents of commercial houses should know Spanish, should have a certain amount of experience and tact, and should be able to adapt themselves to the social customs of the country.

Commerce of Mexico in 1896–97.—The Estadística Fiscal, No. 153, Mexico, 1897, gives the following table in regard to the commerce of Mexico during the fiscal year 1896–97, compared with that of 1895–96:

Countries.	1895–96.			1896–97.		
	Imports.*	Exports.		Imports.*	Exports.	
		Mexican currency.	United States currency.		Mexican currency.	United States currency.
Germany	$4,363,229	$2,968,792	$1,576,428	$4,003,263	$4,416,744	$2,309,957
Belgium	420,015	1,000,393	531,208	479,850	1,134,325	593,361
Spain	2,174,298	813,162	431,788	1,983,794	1,192,328	623,587
United States	20,145,763	79,651,695	42,295,050	22,593,860	86,742,951	45,366,563
France	6,099,183	2,080,802	1,104,905	4,989,082	1,873,522	979,862
Holland	134,284	123,955	65,820	132,728	57,906	30,284
England	7,905,016	16,467,149	8,744,056	6,881,701	14,280,527	7,768,715
Italy	150,369	44,443	23,599	184,186	10,765	5,630
Russia	17,789	536,525	284,904	31,387	294,165	135,849
All other	843,992	1,329,997	706,116	924,244	1,343,261	420,408
Total	42,253,938	105,016,902	55,763,874	42,204,095	111,346,494	58,234,216

* The imports into Mexico are calculated on the basis of United States currency; the exports have been reduced, taking the average for the year 1895–96 as 53.1 cents and for 1896–97 as 52.3 cents.

Commerce of Costa Rica in 1896.—The Revue du Commerce Extérieur, Paris, September 4, 1897, has a letter from a correspondent in Costa Rica, in which it is stated that the economic condition of the country is encouraging. The imports amounted to $4,748,818 (gold) and the exports to $5,597,727. From the total of the exports, however, some $500,000 must be deducted, as this represents the money sent to London to the Atlantic Railroad Company, the net product of the enterprise from January 1 to December 31, 1896. The export of coffee is steadily increasing; 11,715,801 kilograms (25,828,654 pounds) were exported during the past year, to the value of $4,318,285. Bananas were exported to the value of $670,072. New land is constantly being opened to cultivation. An important question before Congress, which will probably be decided favorably, is the approval of the contract between the Government and the house of John S. Casement, of the United States, for the construction of a railroad between San José and the projected port of Tivives, on the Pacific. A French establishment was among the competitors for this contract. The road is to be constructed at a cost of $2,898,971 in United States money, which makes the net cost per mile $52,890. Work should be begun within six months, and it is calculated that it will be completed in two and a half years, when the Government will receive the road, with all appendages.

Commercial Movement of the State of Sao Paulo.—In the Revue du Commerce Extérieur, Paris, September 4, 1897, a report from Brazil is printed, giving the importations into São Paulo during 1896 as 220,000,000 milreis ($120,120,000) and the exports as 280,000,000 milreis ($152,880,000). The countries which took part in the import trade were: England, 26 per cent; Germany, 22 per cent; France, 9 per cent; Belgium, 4 per cent; Austria-Hungary, 3 per cent; Italy, 8 per cent; United States, 8 per cent; Argentine Republic, 8 per cent; Portugal, 5 per cent. The largest proportion of the exports (30 per cent) went to the United States. Germany had 25 per cent; France, 15 per cent; Austria-Hungary, 9 per cent; Belgium, 7 per cent; Italy, 3 per cent; and England, 2 per cent.

Details of the Commerce of Uruguay, 1896.—The Revue du Commerce Extérieur, Paris, September 18, 1897, publishes the following:

The complete reports of the foreign commerce of Uruguay in 1896 show that there has been a decrease in the trade with five countries and an increase with four. The commerce with Brazil has decreased some $400,000; France, over $600,000; England, $3,500,000; the United States, $1,300,000; Italy, $100,000. There has been, on the other hand, an augmentation of traffic with Belgium to the amount of $1,300,000; with the Argentine Republic, $2,100,000; with Germany, $500,000; and with Spain, $300,000. The total diminution amounted to $2,000,000 on both imports and exports.

Commerce of Tahiti (Society Islands) in 1896.—La Quinzaine Coloniale, Paris, July 10, 1897, publishes the following:

The commercial movement of Tahiti has been excellent throughout the year, thanks to the rise in price of mother-of-pearl and vanilla, which, with cocoanut kernels, constitute the chief exports. The commerce, according to countries, in 1896 was:

Countries.	Imports.		Exports.	
	Francs.		*Francs.*	
United States	1,346,759	$259,724	1,473,943	$284,470
England	474,472	91,573	802,394	154,862
New Zealand	594,637	114,765	532,371	102,747
France and colonies	313,756	60,555	149,278	28,810
Germany	44,642	8,615	833	160
South America	60,170	11,612	142,637	28,528

Comparing these figures with those for 1895, an increase is noted in the importations from all countries except France, and an increase in exports to all countries except Germany, France, and South America, which have diminished noticeably. In spite of the reduced tariff for imports from France (10 and 15 per cent, instead of 30 and 40 per cent which are levied upon other foreign produce), France is only

in the fourth place in importance of commerce. The market for alimentary products, articles of iron, steel, and porcelain, cotton and woolen goods is practically in the hands of the Americans and English. The United States supply articles for consumption, including a large proportion of wines. Manchester cottons have had the lead, but there have been recent importations of cheap cotton goods from the United States which are creating serious competition. The Germans supply shawls and woolen covers, as well as cutlery, at a very low price. There is now regular steamship service every twenty-eight days between Auckland and Tahiti.

Commercial Conditions in Chile.—A correspondent writes from Santiago to the Revue du Commerce Extérieur, Paris, September 4, 1897:

A better knowledge of the habits of the Chilean people would be to the profit of French tradesmen. Chile is an organized country. Its constitution guaranties to all inhabitants, native or foreign, personal liberty, equality in law, proportional division of taxes, freedom in education, in the press, in commerce and industry. There are no monopolies, no privileges for individuals or societies. Patents last for ten years. Legal interest is 6 per cent; no rate can be more than 8 per cent. Contracts, the value of which is over 200 piasters, should be made in writing before a notary; proof by witnesses is not allowed. Current accounts should be made according to an established form; commercial securities, large loans, and all maritime conventions should be legalized in the same way. The usurpation of trademarks, etc., is legally punishable, but in practice frauds against commercial and industrial property are tolerated. Civil and commercial procedures are almost interminable, and they involve loss of time and money. It is much better to settle the matter by arbitration, which is also authorized and sanctioned by law. The Anglo-Saxons, with their practical business sense, have found the way of reducing legal expenses to a minimum. They make arrangements with lawyers to whom they pay annuities contracted for in advance, and make no transactions out of the daily routine without consulting these legal advisers. Instead of hampering business relations, these arrangements facilitate them.

The taste of the Chileans has an individuality, which does not mean that it is difficult to please. Most of the people live from day to day, working little, saving nothing at all, spending money on useless things. The women, even those belonging to the poorer classes, like special ornaments; the men like certain sorts of cloth, certain colors, and will accept no others. The price of an article is a matter of secondary importance to them. If their taste is satisfied, they pay without question.

An article in the same journal, in its edition of September 18, 1897, says that the agricultural season in Chile is promising, abundant rains having had favorable effect upon the cereals. The working of the mines of copper and manganese continues actively. The exportation of nitrate has increased, in consequence of the rise in price of that article. Two important negotiations have just been concluded. A French syndicate is to undertake the construction of the railway from Melipilla to Valparaiso, and will receive for the work £2,000,000 ($9,733,000) in 4½ bonds. Another syndicate,

composed of English and German houses, is to take charge of the electric lighting of Santiago and of the electric railways in service in the city. The motive power will be taken from the River Maipo. Some 26,000,000 marks ($6,188,000) are already invested in the enterprise, and the work will be begun at once. There are a number of water currents in Chile having a fall sufficient to develop electric power, which will doubtless be utilized in the development of national industry.

German Trade Methods in Russia.—The Revue du Commerce Extérieur, Paris, October 2, 1897, refers to an article published in an English newspaper of Leeds in regard to the commercial preeminence of the Germans in Russia. According to the article, the majority of German houses which are engaged in transactions in northwest Russia belong to commercial associations which act in concert, though retaining a separate existence as trade establishments. Their agents are well trained and better educated than most traveling men, and are thus in a position to meet the official classes and landed proprietors of Russia on equal footing. The information furnished by these agents is of inestimable value for the houses they represent. Most of the Russian exports pass through the hands of the subagents of these commercial associations before reaching the market. On account of the personal relations of the agents with their Russian clients, an infinite number of details as to the needs of the most remote rural centers come to the knowledge of the German associations—details which are inaccessible to the ordinary traveling men. This same knowledge enables them to facilitate the sale of industrial products of Germany; and being at once buyers and sellers, they can easily grant exceptional facilities of payment. In this way, they have acquired a far-reaching influence on the interior commerce of Russia. This state of affairs displeases Russian producers, who are often entirely in the power of the German agents. The Revue du Commerce Extérieur thinks that the relations which the French are endeavoring to establish in Russia will be favored by this antagonism, but admits that the struggle against German competition will be hard. The case of a Russian cooperative association is quoted, which was formed some ten years ago to contest German influence, and which, although successful at first, failed on account of natural causes. It was impossible to obtain agricultural implements elsewhere than in Germany, especially those employed in dairies, which, on account of local habits, were obliged to conform to special conditions. The association was also unable to place its commodities upon foreign markets without passing through the hands of merchants bound by business relations to the German societies. The Revue

concludes by saying that a lesson should be learned from this example. A struggle with the syndicates tacitly formed by Teutonic agents will necessitate energetic efforts and large capital. French merchants should grant favorable credits to their clients, and send capable and well-paid agents. The Russians will transfer their business relations readily as soon as facilities are offered them. The concurrence of banks in the large centers of population is also indispensable to obtain advances to the agriculturists. With this aid and with capable representatives, the Revue thinks that German commerce can be prevented from monopolizing the great northern Empire.

Important Concession in Servia.—The following appears in the Revue du Commerce Extérieur, Paris, September 18, 1897:

A law issued at the end of last July granted a German engineer, Hugo Luther, the exclusive right to use the rapids of the Danube between Brnitza and Kladovo for the production of motive force. The concession lasts ninety-nine years. At the same time, the right was granted him to extract coal, iron ore, copper, lead, silver, gold, etc., from the earth in the east of Servia, and to cut wood and to build the workshops that may be necessary in the accomplishment of his designs. The concessionary is only bound to observe certain Government regulations, and is exempted from taxes and customs duties for thirty years. It is estimated that the falls of the Danube have about 200,000 horsepower.

Commercial Education in Japan.—The London and China Telegraph, London, September 6, 1897, publishes an article abridged from the Times, as follows:

In the course of their rapid development, the Japanese were forced in their unpreparedness to permit foreign powers to establish settlements in the country quite outside the jurisdiction of the Japanese—practically independent territories—to make treaties and to surrender their right to alter the customs tariff. They chafed bitterly under this indignity, but they had no remedy, for they were weak while their dictators were strong. Japan was rich in resources of valuable and varied character, but as it had no experience of trade beyond its own coast—excepting with the adjacent mainland and the adjoining islands—foreign commerce passed altogether into the hands of the foreigners, who, as already mentioned, had practically forced the establishment of several semiindependent settlements at the leading seaports, entirely beyond the jurisdiction or control of the country's Government. The Japanese saw that in the most favorable circumstances they could not undertake this foreign trade just then, as by custom and education they were quite unfitted. With that aptitude and quiet perseverance which are their chief characteristics they determined to qualify themselves, and if they could not recover their rights politically they would wrest this trade from foreign hands by pure competition on an even ground. With this object in view they established those excellent commercial schools which are a standing credit to the country, the pride of its people, and the admiration of all visitors who inspect them.

There are several of these schools in Japan, of which the largest are in Tokyo, the capital, and Osaka, the Birmingham of the East. Primarily, these institutions provide the necessary course of instruction relating to commerce in general for those designed for a commercial career. The system of instruction is divided into four courses, namely: (1) The preparatory course of two years' duration, in which students are prepared for the next; (2) the principal, of two years also, in which students receive a thorough ordinary commercial education; (3) the higher course of one year, in which the graduates of the principal course pursue their studies further for the purpose of more complete finish; and (4) the special course of two years, in which an easy practical course of instruction is given. The courses of instruction are:

Preparatory course.—Morality, Japanese (reading, penmanship, composition), mathematics, geography, history, drawing, physics and chemistry natural history, English language, gymnastics, and military drill.

Principal course.—Japanese commercial correspondence, commercial arithmetic, bookkeeping, study of commercial and industrial products, commercial geography, commercial history, political economy, law, English language, business practice, gymnastics, and military drill.

Higher course.—Calculations in bookkeeping, business principles and commercial usage, economical science, law, English language, elective foreign language (French, German, Spanish, Chinese, or Korean), gymnastics, and military drill.

Special course—Morality, Japanese (reading, penmanship, composition), commercial arithmetic, bookkeeping, business principles, commercial usage, English language, practical application, gymnastics, and military drill.

A novel and extremely interesting feature of these schools is the business practice department, taught in the principal and special courses. With wise forethought, which is the more laudable because of the direction in which it was applied, and an unswerving energy which was yet deliberate and cautious, the Japanese have organized in this branch of instruction a means of developing a mercantile community which commands the unstinted admiration of every one. Its object—to quote the simple explanation given by the school authorities—is to teach practically the methods of transacting business in various branches of trade and commerce, both domestic and foreign, according to the most modern systems in use throughout the world. An endeavor is therefore made in this department to apply practically all that the students have learnt theoretically in the other courses. Before entering into this branch the students receive preparatory lectures on business topics, such as the ways of investment, the method and order of conducting business transactions, the filing, arranging, and use of books, correspondence, forms, and documents, as well as the packing, measuring, and weighing of products and goods. These are all taken from methods in practice among local and foreign brokers, commission merchants, traders, auctioneers, banks, navigation, railway, and insurance companies, custom-houses, manufactories, etc. Having all become fairly conversant with the English language, the students are put through a course of commercial conversation in English by a teacher of the same nationality, who also lectures them, in the same language, upon commercial idioms and methods in practice in British countries.

When the students have acquired all the foregoing essential particulars, they are put into practice by what may be aptly entitled the master stroke of the whole system. This department is termed the Business Exchange Hall—a large room, round three sides of which make-believe foreign countries and important ports are marked off into a number of small compartments divided by two partitions and counters. At the end of the room—the remaining side—are other sections representing Japan and its chief ports and the teachers' desks. In this room the students are required to organize and establish themselves in various kinds of business,

either independently, in firms, or in companies. Currencies, merchandise, steamships, and railway trains are represented by models and cards. They practice and keep the various books in proper order, dispatch and file correspondence, issue bills, notes, and bonds, pay and receive money, transfer, sell, or purchase merchandise, avail themselves of market fluctuations indicated by one of the teachers, and, in fact, identify themselves with all the essential features which constitute the daily routine of a busy commercial community.

Strict discipline is kept in these practical nurseries of the nation's future greatness, no slipshod work is allowed here, no papers are left lying about, no accounts are carelessly kept on paper scraps, and no letters are left unanswered. The students are shown how to file and keep letters and documents so that they can reproduce them for reference at a moment's notice. They are also taught the proper use of telegraph codes and ciphers. While thus being trained they are also incessantly counseled to observe the importance and great necessity of order, exactness, prudence, and credit in business.

The students are respectively made, under the instructor's directions, to engage in turn in various lines of business, such as those of bookkeepers, secretaries, accountants, or agents, to assume the position of clerks or managers of banks, insurance or transportation companies, to officiate at branches or take charge of head offices. Furthermore, the instructors occasionally accompany the students to firms, banks, exchanges, factories, fairs, markets, custom-houses, etc., with a view to inspecting the real business and to acquiring knowledge of what is actually going on in the busy world of trade.

The study of English is one of the most important subjects of the schools. It is taught in every course. It will be seen that Japan's whole system of commercial education is one to which, in its completeness, even Anglo-Saxon countries have not yet attained. It displays both the intellectual and the intensely practical genius of the Japanese, as it is adapted generally to the latest requirements of the most progressive commercial countries, and suited specially to the local needs of Japan. It may have defects, but it can safely be asserted that no better system could be devised for rendering education attractive as well as useful. Above all, however, it is an earnest of the determination of the Japanese to qualify themselves to take that place in the van of enlightenment and progress to which our own race owes its present unparalleled advancement, an ambition that is unquestionably noble, and to which peoples of every color, creed, and clime are entitled to aspire.

German Commercial Mission in the Far East.—The Revue du Commerce Extérieur, Paris, October 2, 1897, says:

The commercial mission sent by the German Government, together with the chambers of commerce, to study conditions in the far East, is now in China. The special object of the mission is to find what demand for foreign products there is in the Eastern market, and what opening there is for German goods, to study how the various raw materials of the countries can be transported directly to Germany, to gain information as to means of transportation and also as to the result of investing German capital in the East. Not content with seeing the chief ports of commerce—Shanghai, Hongkong, and Canton—the mission will also visit the small ports open to commerce on the coast and Yangtse, such as Ningpo, Amoy, Hastacoi, Hankan, Sutschau, etc. It will shortly to go to Tientsin and Peking, and will end its voyage in Japan.

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